the merican er mer and ESSENTIAL OIL REVIEW

COSMETICS - SOAPS - FLAVORS

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Editorial Comment

The Art of Salesmanship

We recently came across the following item in a 1914 issue of The American Perfumer. Since we are all salesmen, in a sense, we reprint:

"I am not a salesman, but I am a good buyer. Hence, it may be interesting to salesmen to listen for a brief spell to a consumers ideas.

I here and now confess that ninetenths of what induces me to buy is the ability of the seller to jolly me along. Cheerfulness and signs that you feel good, enjoy life, and are full of glee inside, are better than a letter of introduction, from Mr. Rockefeller. Don't argue, state facts. Don't arouse opposition in the buyer's mind. Agree with him or dodge the issue. Lead him around to some subject where you are at home. I hate to have a seller try to prove I'm wrong. Perhaps I am but I don't like to admit it.

Use plain language. Never use a term when there is any doubt whether the customer understands it. We don't like to be made to appear ignorant.

Tell the truth. If you are with a firm where you dare not tell the truth, leave it.

Be candid. Do not conceal things. The thing you have to sell has certain merits, it ought to sell on these. To sell a thing upon merits it does not have is poor policy.

Be dependable. Even if you make a casual remark, for instance, that you will send a man a bunch of blotters or a book or calender, don't fail to do it. Forgetting is almost as bad as lying. If you promise to come back Tuesday, do it, or send a telegram. Create the impression that you will keep your word if it bankrupts you.

Have a good appearance. There may be a few people left who like to see a dirty shirt and frayed cuffs, but they are growing scarcer every day.

When you attack a customer aim two inches below his collar bone. If you can make him like you it is far better than to prove anything to his mind. Very probably he hasn't much mind to speak of. But we all have hearts."

The WOMAD PAYS

...and smart Merchandisers

WOMEN-pay for-(buy)-¾ of all goods sold in the United States at retail.

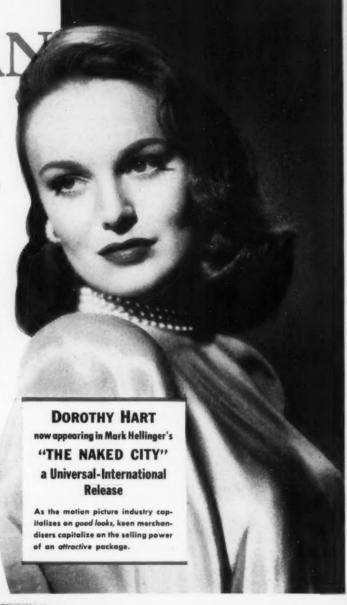
That fact doesn't influence the sales strategy of manufacturers who do not realize its significance. But this country's leading merchandising organizations capitalize on it. They conduct nationwide surveys to learn how women buy.

Those surveys show that women make ¾ of their decisions—as to what brand to buy—in the stores—at the point-of-sale—on impulse.

THERE—they react to what they SEE. There—the appearance of your product's package is a DECISIVE sales factor.

HOW TO MAKE YOUR PACKAGE SELLI

Let Ritchie help you develop (at low unit cost) a package that meets the increasing challenge of self-service retailing. A practical, production-planned package that instantly identifies, fully protects and conveniently dispenses your product. Easy to fill—to handle—to stack or display. An attractive, eye-stopping, SELLING package.





W.C. Ritchie

Ond COMPANY

SET-UP PAPER BOXES

and COMPANY

AT Bettimers Average - Chicago 17

AT SET-UP PAPER BOXES

A FIBRE CANS

A VEANSPARENT PACKAGES

NEW YORK . DETROIT . LOT ANGELES . EL LOUIS . CHARLOTTE . JACKSONVILLE . ERIE

Underestimate

Besiderata by MAISON G. DENAVARRE

IRONE

There is one thing about the present confusion regarding who was first to discover a method of making irone and that is that two great scientists were able to make the same discovery, each without knowledge of what the other was doing. It is also remarkable that so complicated a substance has yielded to the skill of the chemist. As a result everyone will profit thereby.

FAT DERIVATIVES

The cosmetic industry having developed a use for such materials as glyceryl or glycol monostearates, other industries have picked them up and the market has apparently been so expanded that the big boys in the oil and fat business are at last taking a look at making derivatives from fats. At least two new suppliers . . . big ones that is, are offering such materials as the mono-esters of fatty acids and polyols, isopropyl palmitate, propyl oleate and the like. This will raise standards and in general improve both product and price.

BEAUTY SHOW

The recent Beauty Show in Grand Central Palace in New York was much the usual thing with little in the way of novelty. A coffee shampoo display provoked one onlooker to ask the attendant "will I be kept awake all night after shampooing my hair with your coffee shampoo?"

Some innovations of cold waving methods were trying to make the grade. One large manufacturer was introducing a radar wave using heat to produce a wave. Author Hillier was selling his new book on perma-

nent waving at his booth. A fortune teller and a hand writing analyst adorned the aisles just past a booth displaying a lot of massaging equipment.

Joe Byrne may have made the show pay but it sure was like a side show at a circus instead of an industry affair. Cheap jewelry, hair combs, hair pins and other stuff, including a special "bottle" closure filled a lot of dusty disorganized booths.

HORMONE CREAMS

On the program of papers to be read at the meeting of the Society of Cosmetic Chemists will be an outstanding one on hormone creams, by a noted New York endocrinologist. Many will remember the address given by Dr. Goldzieher a year ago. You will be sorry if you miss this one, at the Biltmore Hotel on May 20. Anyone can come.

SULFATED SYNTHETIC FATS

The shortcomings of sulfonated oils of the usual variety are well known to many. Often they are made in cast iron kettles and they carry along a pretty good shot of iron with them, for better or worse. Realizing all this, one supplier offers a sulfated synthetic oil, possessing the properties of the sulfonated oils of commerce, without their drawbacks. The price is said to be competitive. Some use in color grinding for cosmetics has already proved their usefulness.

GELLED OILS

It has taken the cosmetic industry quite a while to take advantage of the gelling ability of metallic stea-



M. G. DeNavarre_at work in his laboratory

rates on oils. The recent plate type make-up wafer is one place where they would do a job especially with a material such as say isopropyl palmitate. The gels possess numerous advantages over hardened oil cakes in which waxes are used to get consistency. In fact, this idea should have wide application in a number of cosmetics where an oily feel without oiliness is desired, or where consistency without stiffness is needed.

CALCIUM THIOGLYCOLLATE

Some licenses on calcium thioglycollate depilatory are still available to particular types of manufacturers, catering to special consumer groups. If you are interested, this department will give you the name and address of the person and company to contact.

REPORT ON WETTING AGENTS

Many know of the several reports published by Lester Hoyt on "Synthetic Detergent and Washing Agents," appearing under the auspices of the Department of Commerce, Office of Technical Services. One has been published in book form and that is PB-3868, available for \$5.50 at the office of the publisher.

This particular report covers the development of synthetic detergents in Germany, before World War II and during it. It is 69 pages long with a good table of contents replacing an index.

The author, an expert in this field, knew what he was looking for



OU'LL find many a nationally known product packaged in New England "Sheffield Process" Tubes. Small-wonder STACOMB, and other leaders in the drug, pharmaceutical and cosmetic field "specify New England". For, here are sturdy tubes that consumers prefer for their compact efficiency, easy dispensing of exact amounts without mess and bother, and for care-free packing in travelling bag or medicine chest without danger of breakage. Manufacturers like the way they cut returned goods losses, offer economies in shipping because of light weight, and they prefer their fine uniform quality, with crisp, clean tube decoration. If you market any product which can be packed in Collapsible Tubes, call or write our nearest field man. You'll find him trained to give you the kind of service and the friendly cooperation you need. And this is one invitation that involves no obligation on your part. We'll welcome the opportunity to discuss your packaging problems.



NEW ENGLAND COLLAPSIBLE TUBE CO.

3132 S. CANAL ST., CHICAGO 16 • NEW LONDON, CONN. • W. K. SHEFFIELD, V. P., 500 FIFTH AVE., NEW YORK 18.

T. C. SHEFFIELD, 7024 MELROSE AVE., LOS ANGELES 38 • C. W. MILLER, 151 COLE ST., SAN FRANCISCO 17

EXPORT DEPT: 500 FIFTH AVE., NEW YORK 18, CABLE "DENTIFRICE", NEW YORK

in Germany and he found it. The report covers the work leading to present-day developments starting with 1917. Batch cards for such materials as Igepons and Igepals among others, are included. It is a worthwhile addition to anyone's library.

COLORING CREAMS

Often a cosmetic manufacturer wants to have a particular cream colored so it looks rich and appealing. The shade can be easily produced by using some yellow petrolatum in the formulation. Of course an oil soluble certified dye will work too but don't fail to explore possibilities without added coloring by using a tinted petrolatum. Such petrolatum is also a bit lower in price than the white material.

SHAMPOO FILTERING

The question is often asked, "at what temperature should I filter my

soap shampoo?" Or a variation of it is, "to what temperature should my shampoo be chilled to produce a clear product after filtering?"

The answer is much the same as that for cologne. Manufacturers vary their procedures a lot. Some go almost to the freezing point, while others like to stay about 10 deg. above freezing as the low point. In other words, chilling to around 35-40 deg. F. is rather general practice. If the soap solution is allowed to age as long as possible, the chilling need not be carried on over long periods of time. Over night is sufficient if the soap solution has stood at least a week. Some shampoo manufacturers allow aging to go on for several months in tall, conical bottomed tanks before filtering. The big fellow doesn't have much of a problem for there is a lot of large scale equipment available; it is the small fellow who has the problem.

water and 33 per cent No. 40 alcohol. My hair tonic must not contain any soap or other emulsifier to hold the oil in suspension.

V. А. J.-Оню

A: To get the pectin extraction flow sheet, we suggest that you write the U.S. Department of Agriculture at Ontario, California. To prevent your hair tonic from becoming cloudy, you will probably have to increase the amount of alcohol or have your perfume supplier blend a compound that is soluble in 33 per cent. Your problem is simply one of insolubility of the amount of perfume used in the finished alcoholic strength of your product. Your perfume supplier will be able to make some suggestions as to types of odors for this purpose.

693. DANDRUFF REMOVER

Q: In your November 1947 issue, under your Questions and Answers column—No. 668—Dandruff Remover—mention is made of stimulating ingredients. We will appreciate further information on names of traducts

F. S. N.-KANSAS

A: Among the stimulating ingredients that are used in hair tonics are the following: Cinnamein 3 per cent, Tincture of Cantharides 5 per cent, Tincture of Cinchona 5 per cent, Tincture of Pilocarpus 10 per cent, Potassium Arsenite Solution 1 per cent. Of course there are others, but these will give you something to work with. Ordinarily, at least 50 per cent alcohol is present in these products.

694. HAIR DYE

Q: I would like to add to our line of products for barbers, a hair color for gray hair similar to the many, many already on the market, and wonder if you can furnish us with a working formula for a good product.

C. T. S.-GEORGIA

A: The type of product you refer to is known in the trade as a lead-sulfur hair dye. Ordinarily, these products are made with a small amount of glycerin, 2-5 per cent, 1 per cent of lead acetate, more or less, with varying amounts of colloidal sulfur. Adequate labeling giving precautions for usage must accompany the product.

QUESTIONS AND ANSWERS

690. SUNTAN OIL LIQUID

Q: I should be greatly obliged if you could give me a formula for a good suntan oil liquid.

R. U. C.-MAINE

A: Dissolve 4 per cent of menthyl anthranilate, 1½ per cent isobutyl p-aminobenzoate, 8 per cent homomenthyl salicylate or ½ per cent of beta methyl umbelliferone in your oily material. The oil will probably have to consist of 25 to 35 per cent of vegetable oil and the balance mineral oil. In place of vegetable oil you may wish to use a synthetic material such as methyl, ethyl, isopropyl or butyl palmitate or stearate.

691. ANTIPERSPIRANTS

Q: Within the past year the subject of antiperspirants has greatly interested me. Now I plan to put an antiperspirant on the market. I plan to use the standard 15-25 per cent solution of aluminum chloride and aluminum sulfate, with an "antiacid" reagent. It is to be used for the hands only and intend to market it in the form of a service. Do you

have any good formulas as starters? It must be an aqueous solution of aluminum chloride or aluminum sulfate or both.

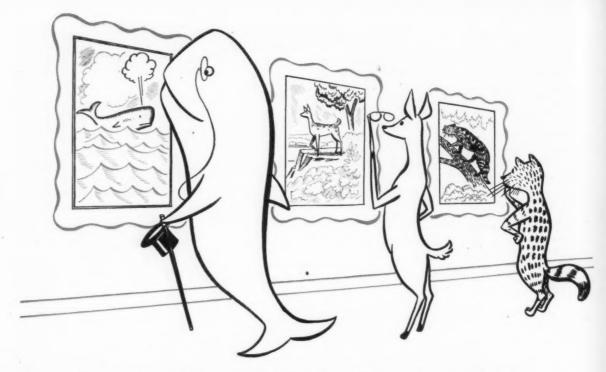
G. S. C.-INDIANA

A: You have practically answered your own question. There is nothing more to your problem than to dissolve the required amount of aluminum sulfate or chloride in water. Perfume may be added and phenyl ethyl alcohol is very suitable for this purpose. As to the antiacid, we have none to suggest and to our knowledge there are quite a few patents covering the use of such compounds in antiperspirants. However, there is one ingredient known as aluminum chlorhydrate which is already substantially buffered and the supplier of this compound goes to you under separate cover.

692. PERFUMING HAIR TONIC

Q: Where can I find a flow sheet on the extraction of pectin from fruit? Will you please tell me how to perfume hair tonic without it becoming cloudy when the hair tonic is of a consistency of 60 per cent

mer



True reproductions of the originals— PENICK'S Amberscent, Muscent and Civescent

These Penick synthetic fixatives are new triumphs of our laboratory technicians and chemists.

AMBERSCENT, MUSCENT and CIVESCENT are being accepted with enthusiasm by the perfume industry and are daily gaining favor and popularity with those who are using them. They are "True Reproductions Of The Originals," adding that lasting touch so often lacking in the usual types of synthetics.

Here are several of the outstanding features of AMBERSCENT, MUSCENT and CIVESCENT:

They replace the "absolutes" (usual concentration 4 oz. to 1 gal.) pound for pound. They are designed to eliminate the tedious "tincture method." No ageing is necessary. They are soluble in alcohol or other solvents. A 3% solution will prove their persistence and intense power.

Write for further details.



Why We Brush Our Teeth

How the toothpaste industry taught America to brush its teeth

DON WHARTON

DENTIFRICES didn't originate in America, but it is here that they have come into full flower. No country spends anything like, the United States on them—over eighty million dollars a year. Last year the advertising bill alone for tooth powders, pastes and liquids totalled sixteen millions. Amos 'n' Andy, one of radio's greatest entertainment teams, was made possible by tooth paste. So was Bob Hope.

A PRODUCT FOR THE SELECT FEW

Like perfumes, rouge and brassières, dentifrices reach back to the ancients. A Greek physician put a tooth paste formula into verse over two thousand years ago. In Nero's time a Roman poet with the soul of an ad writer sent a friend a sample of a dentifrice which he claimed capable of whitening the teeth, healing the gums, and removing tartar. George Washington's dentist advised him to use chalk, which at that time was rubbed on the teeth with a rag. In a few decades the toothbrush arrived, but dentifrices still remained a product for the select few.

Then, in 1859, an ingenious New York wholesale druggist, William Henry Hall, began advertising a red liquid called Sozodont, from Greek words meaning "save" and "teeth." The preparation could have been more accurately named Sozodon't, for it was actually 37 per cent alcohol. Sozodont was the first dentifrice to use a national advertising campaign. Its ads began to appear during the Civil War, crammed between advertisements of Tifany swords, seven-dollar Army watches, ointment for wounds, and stereoscopic views "of the present war." An 1864 ad claimed Sozodont hardened and invigorated the gums, cleansed, beautified and preserved the teeth, purified and sweetened the breath—"the most convenient, efficacious and beneficial article for the Teeth the world has ever seen."

Hall was a pioneer user of testimonials, jingles, scare copy and leg art. One ad carried endorsements of 15 leading New York clergymen—pastors of society churches. Testimonials by governors, judges, actresses and singers were also used. Sozodont ads quoted Bismarck, intimated the product was used in the White House, and even told readers what the wife of an ambassador asked "the daughter of one of our Merchant princes at a Presidential levee."

SAMPLING CAMPAIGN

The use of legs to sell goods can be traced to an old Sozodont ad showing a scene in a "Sultan's harem." The get-your-man advertising so prevalent today was introduced in the 1870's with: "MEN GO WILD about splendid teeth. Therefore, fair ladies, it behooves you to know



Advertising slogans became so well known they were put to music and sung by glee clubs

ner

that Sozodont makes them glitter like Orient pearl." Half a century before Halitosis or "Pink Tooth Brush" Sozodont's scare copy proclaimed: "Time was when ladies did not 'clean their teeth'; but now, thanks to good taste and the constant use of Sozodont, the best dentifrice in the world, a belle's breath is almost as sweet as herself." In the 1880's Sozodont started a nationwide sampling campaign, giving away as many as 25,000 samples in one city.

By 1893 probably no word was better known in the household than Sozodont. Even Mark Twain kidded the product. In A Connecticut Yankee in King Arthur's Court he pictured a knight carrying "a big shield with its quaint device of a gauntleted hand clutching a prophylactic toothbrush with motto: 'Try Noyoudont!'"

When William Hall died in 1894 Sozodont profits had swelled to ten million dollars. But pastes and powders began to challenge the reign of the worthless red liquid. Hall's three sons and two daughters tried to launch a Sozodont powder and a Sozodont paste, but without success. Later one daughter, Martha Hall, spent a million dollars trying in vain to bring the red liquid back into favor. At her death the ten millions had dwindled to two and the remnant of the Sozodont fortune finally went to hospitals and medical research. Sozodont ads had at least taught some people to brush their teeth.

DR. LYON'S CANNED TOOTH POWDER

In contrast to this tale of a quack, typical of many dentifrice manufacturers, is the story of Dr. Israel Whitney Lyon, who put powder into a can. Born in Massachusetts, the son of a hat maker, Lyon went to California on a clipper ship in '51, ran a restaurant for the Forty-Niners, then decided to return East to become a dentist. After a course in a New York dental college, he worked his way back to the gold fields. The first dentist in Calaveras County, Lyon made a 250-mile trip each month through the Mother Lode country. The miners back in the hills always gave him a royal welcome and he had



The use of leg art to sell goods can be traced back to the first dentifrice to use a national advertising campaign

a colorful life, as he put it, "stuffing gold in their teeth and taking it out of their pockets." But he found the gold country no place to raise a family and in '66 came back to New York.

That year the American Dental Association condemned liquid dentifrices and recommended a formula for a powder. Dr. Lyon went to work with this formula and in the basement of his house at Yonkers produced Dr. I. W. Lyon's Tooth Tablets. These tablets were powder compressed into a thin cake, scored like a Hershey bar into sections which could be broken off and placed on a toothbrush. Lyon's first trade mark was a lion holding a toothbrush; five months later he'd replaced it with the head of a beautiful woman—a trade mark still in use.

Sales the first year totalled only \$210 and the Sozodont people, spending that much on one ad, laughed at the newcomer. But Dr. Lyon had ingenuity as well as principle. He progressed from a sliding paper box to an oval-shaped, gold-lacquered metal container which kept the tablets fresh and, when they were used up, made a handy receptacle for pins and needles. Into every box he packed a tiny metal cutter so that consumers could break off the tablets without fingering them. In 1874, Dr. I. W. Lyon's Tooth Powder was added to the Tooth Tablets and sold in green hand-blown bottles.

One day Dr. Lyon had an inspiration: why not package his powder in a can? This can, with Dr. Lyon's "telescopic measuring tube," was introduced in 1891. In four years his powder sales jumped to \$63,000 annually while the tablets dropped to \$2000. Five years later powder sales were \$184,000 and in five more years \$402,000.

HONEST ADVERTISING

Dr. Lyon started with the backing of some first-class dentists. He used their names to sell his products but his advertising was honest. He never claimed his tablets and powder would cure anything. "They contain no magic, but are a simple, safe, neat and very convenient preparation"—these words were printed in a folder slipped into every box, at a time when there was no pure food and drug law and no Federal Trade Commission to keep manufacturers from lying. In 1878 Dr. Lyon in a popular magazine flatly said: "It is useless to say that any dentifrice will whiten the teeth or change their color one particle—anything which professes to do it is an acid." Dr. Lyon died in 1907, his sons ran the business for two decades, then sold out. But to this day Dr. Lyon's outsells all other tooth powders.

Tooth pastes were sold in America before the Civil War, some imported, some put up by dentists for their own patients. The paste came in small pots and jars; to use it, one had to remove the cover, wet the brush and rub it across the surface of the paste. People naturally recoiled from this unsanitary dipping, particularly when a whole family had to share one jar. And separate jars for each member of a family were hardly practical in years when the 50-cent price equalled a half day's wages.

TOOTH PASTE IN TUBES

The answer to tooth paste's packaging problem came from Dr. Washington Sheffield, a New London dentist selling paste in jars. Sheffield's son came home from abroad in the 1880's with reports of Europeans selling foods in collapsible tubes. These tubes had first been invented for artists' paints by an American, John Rand, in 1841. Somehow no one had thought of them for tooth pastes. The Sheffields did. They put paste in imported tubes in 1892. Sales went up so fast the Sheffields bought a machine to make their own tubes and then established a plant to make them for other dentifrice purveyors. Quickly a switch to tubes was made by Colgate, which as a sideline to soaps had been manufacturing dentifrices in paste, powder and cake form since 1873.

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The tube revolutionized the dentifrice business, virtually turning it into the tooth paste business. In the early 1900's Colgate advertised that it "couldn't improve the product so we improved the tube." Its slogan "Comes out like a ribbon, lies flat on the brush, Colgate's Ribbon Dental Cream," became so well known that it was put to music and sung by college glee clubs. Liquids and powders began slipping and by 1911 Dr. Lyon's was about the only powder advertising nationally. A quarter century later, during the depression, tooth powder made a great but temporary comeback—possibly because it was cheaper than paste.

Dentifrices haven't had any big changes since tubes were introduced by Sheffield, cans by Lyon, and national ads by Sozodont. Of course, there have been stunts of all types. Back in 1916 when Harvard and Yale football teams met, Kolynos had 38 girls and 18 men giving away 97,484 tubes and 4400 yellow and green balloons—Kolynos colors. Each balloon carried a tag: "Please release me at the bowl when your team kicks a goal." Later came the era of tests. A dentist lined up several pairs of twins, had one of each pair brush her teeth twice a day with Pebeco paste while the other brushed hers with a competing brand. After 30 days photos show one twin with gleaming white teeth and the other looking as though she'd been eating blueberry pie. If you don't know which was which you don't know tooth paste advertising.

THEME OF ADVERTISING

In the 20th century tooth pastes have mainly been sold by ads playing upon (a) fear of disease and (b) desire for beauty or at least popularity. Pebeco was one of the first to produce a catch-phrase, "Acid-Mouth," advertised in the women's magazines of 1916. Later Ipana produced "Pink Tooth Brush," Kolynos "Germ Mask," Bost "Smoker's Teeth," Forhan's "4 out of 5." By 1930 a tooth paste without a scare campaign was as rare as an ad without a male model posed as a dentist. Dentists protested, the FTC moved into action, and even the tooth paste manufacturers began ridiculing competitors' claims.

CREATION OF PEPSODENT

Pepsodent, a commercial sensation, was virtually reated by two advertising men. Around 1915 Albert lasker, meeting an Arizona health-seeker with a tooth paste formula, took a large block of stock and let Claude Hopkins, a genius at ad writing, have a small share. Hopkins began reading dental books, encountered a reference to mucin plaques on teeth, renamed them "film." His ads, launched in 1917, played up this "clinging film" while boosting Pepsodent as a creator of beauty.

Hopkins didn't believe people were interested in preventive measures, concluded their main ambition was to attain "more success, more happiness, more beauty, more cheer." This was the theme of his ads. Every illustration showed "attractive people and beautiful teeth." The results were phenomenal. Pepsodent became the best-seller, at double the going price for most pastes. In a few years Hopkins' \$13,000 stock "paid me some \$200,000 in dividends, then I sold the stock for \$500,000." Lasker made a fortune, and eventually Pepsodent was bought out by Lever Brothers for some ten million dollars.

In the past few years tooth pastes, forced away from false therapeutic claims, have turned more and more to sex. Get-your-man and get-your-girl ads use such headlines as "Unkissed Ann Finds How," "She Can't Resist His Newest Kisses," and "Kiss and Kiss Again." Repulsive disease advertising is today replaced by scare-campaigns aimed at the greatest horror ad writers can imagine: deficient sex appeal. Pyorrhea's modern counterpart is a cancelled date. Pink Tooth-Brush's 1948 equivalent is lips some boy won't kiss. Colgate, which in 1930 was advertising warnings that a tooth paste cannot cure pyorrhea, correct acid mouth or firm the gums, now uses the wallflower scare.

CONSUMERS ARE FICKLE

Colgate is today the top-seller, with nearly a third of all the dentifrice business. But toothpaste consumers are fickle. The average person sticks to the same tooth paste brand less than 18 months and the average household has about three different brands on its bathroom shelves. This unfaithfulness may simply mean common sense recognition that the brands are all about alike. Formulas differ, but all the pastes and powders boiled down amount to an abrasive, a foaming agent and a flavor, usually sweetened, plus substances in the pastes to provide moisture and body.

In tooth pastes, like perfumes, the ingredients are a small fraction of what you buy. Seventy years ago Dr. Lyon, referring to pastes imported from Europe in porcelain pots, said "one-third paste, two-thirds pot." Today a tube of paste retailing for 41 cents represents roughly four cents' worth of ingredients placed in four cents' worth of tube and packaging and given eight cents' worth of advertising. The manufacturer is left about 11 cents for overhead and profit, the retailer 14 cents. Despite this seemingly absurd breakdown-despite all the false ads, silly stunts, scare campaigns, "magic" ingredients (either non-existent or harmful)-tooth pastes, powders and liquids have popularized clean teeth. Extremists say that salt and soda would clean just as well, but salt and soda were available a century ago. It is the almost \$300,000,000 spent on dentifrice advertising in this country which has made people brush and dentist conscious.

In the school years of 1911-12 Colgate alone placed two million samples in the hands of school children while a tooth paste combination deal several years ago put 7,920,000 toothbrushes into American homes. Two hundred years ago this country had a few unadvertised dentifrices and one dentist. Today we spend over a million a month on dentifrice ads and have some 70,000 dentists.

The advertising excesses are the price we've had to pay for cleaner teeth. Before me is the diary of a Union soldier who in the Confederate prison at Richmond in '65 paid \$2.50 Confederate money for a toothbrush. That man didn't need ads to get him to brush his teeth, but he was an exception then—as he would be today.

Our Grasse Correspondent

N our region, the manufacture of all the products which can be extracted from the products of the orange tree starts with the beginning of May.

Lots of things have been written about this tree, particularly typical of our Riviera, but we believe that we should nevertheless recall its history, an ancient history indeed, since this important representative of the perfume plants of the Mediterranean area appeared in Sicily in the year A.D. 1002.*

Under the general name of Orange trees or Aurantiaceae, several species, eatable or not, are included, cultivated either in France or Italy, Tunisia, Algeria, Morocco and Spain. It is the Bitter orange tree (Citrus vulgaris Risso or Citrus aurantium var. amara Linné) which is of interest to us. It grows in quantities at Golfe-Juan, Antibes, Cagnes, on the terraces of Vallauris and Le Cannet, on the hill-sides of Le Bar, Gattières, Saint-Jeannet, Saint-Paul-de-Vence and further in the direction of the Italian frontier: Eze and Mentone.

This variety differs from the common or sweet orange tree (Citrus aurantium Risso) by its wider leaves, larger, more numerous and more perfumed blossoms and its non edible fruits. These have a rugged peel, covered with small cavities filled by an acid and very bitter juice. The bitter orange tree, by the elegance of its aspect and the beauty of its shiny and ever green foliage may be considered as the most beautiful tree of the Provence gardens.

In a good quality soil and with careful culture, a tree arrived at its maximum production reaches twelve or twenty feet. The yield of a tree differs considerably according to its age, the methods of culture, atmospheric conditions, diseases, the attacks of insects, etc.

The bitter orange tree begins its production three or four years after it has been planted, gives a half-crop after ten years and reaches its full production when at full growth, that is after twenty to thirty years.

The flowers, which bloom in May, give by distillation the Oranger flower water and a powerful and fragrant oil, the essence of Neroli, introduced as early as the seventeenth century as a fashionable perfume by Flavia d'Orsini, Duchess of Neroli, who gave it her name.

The small branches and the young shoots obtained from the trimming of the tree constitute the "brouts"; their essence is called Oil of Petit Grain and the perfumed water Brouts water.

The fruits peels, cut in straps and spirals and dried in the sun are used, under the name of bitter orange peels or "coulane" in France for the manufacture of aperitive wines, in Holland for liquors and in England for making puddings.

The greatest part of the essence of Neroli offered on the market is distilled in Grasse. The gathering of blossoms takes place from the second half of April to the end of May, sometimes even to the end of June. This work is done in the early morning by women and children who climb on ladders set around the trees and gather the flowers one by one, in order to bring no damage to the unblown buds. This gathering is not always done without rents and scratches, as the bitter orange trees bear long and piercing thorns which prick very painfully.

Once sorted, the flowers are spread in thin layers on



A "Bigaradier" (bitter orange tree) at its full growth (25 to 20 years)



A bitter orange tree whose branches, frozen, had to be cut after the frost in 1929



A plantation of bitter orange trees at full growth in the neighborhood of Grasse

the pavement of a fresh room. If necessary they are moved with a rake in order to prevent them from heating up. They are then taken up with a shovel, put into bags and immediately delivered to the perfumers for distillation, as the orange blossoms do not keep and must be worked immediately.

They are treated either by distillation, to obtain the perfumed water and the Neroli oil, or by maceration into grease to obtain pomades, or by solvent to obtain concrete.

ATMOSPHERIC CONDITIONS

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In the first case, the atmospheric conditions have a great influence on the production of essence. Is the weather hot and dry, flowers give a maximum yield of oil, as much as 1.2 to 1.4 per thousand. If, on the contrary, weather is cold and damp, the output is small and hardly reaches 1 per thousand usually 0.7 per thousand. Variations of output are noted not only from one year to the other, but even from one day to another. It is also a notorious fact that the yield of flowers increases regularly during a season from beginning to end, with the exception of course of rainy days.

Orange flower water contains in solution methyl anthranylate, phenylethylic alcohol and a set proportion of oil. Treated by solvent, it gives a product sold as Absolute of Orange flower water.

The number of orange tree plantations goes decreasing. Our photography shows that the severity of 1920/21 and 1929 winters was the cause of great damage to the trees, so great that a large number of them had to be cut down close to the ground. In spite of this, the yearly production still reaches almost two million pounds (against four before these years of frost). Golfe-Juan and Vallauris are the chief centres of production.

The price paid for orange blossoms by the perfumery trade varies a lot and was noted as low as frs.: 0.10 per lb. (against four before these years of frost). Golfe-Juan and the creation of Cooperative Societies of Producers, distilling themselves their own flowers, in order to avoid depreciation. But prices have since continually increased and we give below the quotations of the last ten years:

1938	Flowers F	r. 6.75 per k.	Oil at Frs.	6.400 per k.
1939	-	4.10	-	3.700
1940	-	13.00	_	20.000
1941	-	15.00	-	15.500
1942	_	22.50	-	20.000
1943	_	24.75	-	23.000
1944	-	34.55	_	19.250
1945	-	44.25	-	28.000
1946	_	93.00	-	65.000
1947	_	98.50		

no quotation for Neroli Oil in 1947 demands being more and more reduced.

The French Perfumery trade used to absorb approximately one half of the production of Neroli, the other half being exported. This latter market has almost vanished, the economical conditions of several countries, particularly European, having been completely altered at the end of the last wordly year.

As a result, the stocks are yet important at the plants and this situation will have a great influence on the price offered for the flowers of the 1948 season. The farmers wish to obtain frs.: 37.-per lb. (75 francs per kilo) against frs.: 28.-offered by the trade (56 francs per kilo). These

figures are at present under discussion in order to reach an agreement.

Essence of Neroli is mostly used for making Cologne water, aromatic vinegars, lotions, also in almost all perfumes. Its odour is remarkably fragrant and delicate, recalling perfectly, when diluted, that of the blossoms. Its constants are the following:†

0.872 to 0.880
+2 to +6
0.5 at 85 deg. with fluorescence
65 to 85 s.
30 to 55
1.45 to 1.70
12 to 20 per cent

Prof. Sadebeck (Plant Cultivation in the German Colonies).
 Jeancard & Satie: Chimie des Parfums.

Expressed Peach Kernel Oil*

Until a little over two decades ago, the so-called peach kernel oil of commerce (sometimes called "oil almonds P.K.") was obtained from apricot kernels. In 1923, at the request of agents of the United States Department of Agriculture, the oil expressed from domestic apricot kernels was correctly named "apricot kernel oil" and is commercially known as such today.

Peach pits are more difficult to dry and to crack than apricot pits. The percentage of dry kernels obtained from peach pits is, in most cultural varieties, only 9 to 11 of the whole dried pits. Frequently the percentage is even lower. This is less than half the yield from apricot pits, which is 20 to 33 per cent of the kernels, according to variety. For these reasons true peach kernel oil has seldom, if ever, been manufactured in commercial quantities.

Scarcity of edible and pharmaceutical oils and an improved commercial outlet for the by-product shells have resulted in the possibility of an oil pressing operation on a commercial scale. In this operation 21,400 kg. of peach kernels (containing 42.3 per cent of oil) were pressed to produce peach kernel oil and oil-cake meal.

The crude oil has a yellow color and a strong flavor and odor of benzaldehydecyanhydrin. It was easily improved in flavor and lightened in color by simple treatment with an activated montmorillonite. The characteristics of the treated oils are:

Specific gravity, 15 deg. C.	0.9224
Refractive index, 25.5 deg. C.	1.46990
Saponification value	191.4
Unsaponifiable matter, per cent	0.65
Iodine number (Wijs)	98.1
Acid value	0.67
Titer, deg. C.	11
Color (Lovibond)	25 yellow, 3 red
Flavor	Blank, mildly almondlike

The titer is 2 deg. lower than the lowest of the range given by Jamieson. However, it is within the 5-13 deg. C. range given by Hilditch. 2

Jamieson, G. S., "Vegetable Fats and Oils," 2nd ed., p. 173
 Hilditch, T. P., "Industrial Chemistry of Fats and Waxes," p. 119.
 W. A. Bush and B. J. Cagen, 3135 East 26th St., Los Angeles 23, Calif.
 Taken from Ind. & Eng. Chem. 39, 1452, 1947.

JEAN MOWAT

Cosmetic Trends in the Mid-West

TRAINED personnel in the demonstration, wholesale and retail end of cosmetics is imperative today if 1947 figures are to be equalled. This is the first section which merchandisers admit shows a recession, due, in part, to the availability of war-scarce articles. Talk of war has hurt cosmetic sales, for women feel that ice-boxes, stoves and washers are of more importance at the moment than cosmetics.

The firms offering this kind of merchandise have put on a campaign and are receiving the benefits from it. Cosmetic people sit back knowing that theirs is a business which has always been good. But reports throughout this section show that reduction in advertising and special sales on goods are not proving their point of stability in a market that is watching its pennies.

Throughout this area rents went up May 1, taxes were advanced and food continued to rise. Unless there is a move toward trained personnel, consistent advertising of important brands, and smart display, the dollar for cosmetics will go to the departments and stores that feature the most and the best for the least of the customer's money.

NEW BUYERS NEW PRODUCTS

During the war years there were many new babies in cosmetics. Some didn't live out the first year; others are struggling for existence under today's competition. Some will survive and prove their worth, but these will be in the minority. The same casualty list appears among buyers who made a great success of the department when a customer took what she could get, but today she accepts only what she wants. These buyers are panicky. They have no cosmetic background and have been only accepters of merchandise.

Looking back over the period of halcyon days one buyer, who lived through the depression, was frank to state that she expected to make approximately 10 per cent over her 1942 figures. Other buyers ridiculed this idea and considered it poor merchandising. Yet through the war years this woman said: "All I needed was merchandise. One didn't need to sell, it was handed across the counter. Today, one must sell or the goods remain on the shelves. We are training our help, but the girls who've been here during the war resent it. They keep telling me how much their books used to run. We are not interested. We are planning today for tomorrow, and sales must be steady."

POPULATION AND INCOME

To properly understand the cosmetic situation in the Middle West one must realize that today the shifting population of the war years has settled down. Incomes are less, per dollar value. It means that women are buying what they need when they need it. The great increases of the 1943-45 years will not be made again until both population and income are much higher than now.

When the population settles down there is much greater spread in the dollar. For cosmetics to obtain their share of it smart, clever, and intelligent promotions must be made

Here's the score on this type of presentation: In ten major cities of the Middle West, six were giving prominent display to half price merchandise, and six of the largest stores were holding an adjustment sale on current stock. The latter was probably most intelligent.

Smart shops and stores had counter displays indicating that the pot of cream was selling at half price because this particular jar was being discontinued. Yet sales were slow. Women decided to wait and see the new jar, "I may like the shape better than this," was the general comment.

With population stabilized and incomes not stretching as they are needed for current requirements, women will continue to buy smart packages that fit into the modern bathroom. Distributors who want business need to snap up the packages and should use sale outlets rather than the regular counters. It has been proved they stymie sales for the time being until the new packages arrive.

COMES THE GIFTING SEASON

May, June, July are the three big gift months when schools close, brides are led to the altar, and graduates go out to seek their fortunes. All are gifted and the cosmetic counter is a natural for this type of remembrance. In addition to these events, there are vacations, and cosmetics are a must because one cannot tell about the type of (1) soap, (2) water or (3) atmosphere, so it is well to suggest that one carry full cosmetic needs. This is the time of year when small jars, tubes and similar light weight containers are in demand. Yet few stores offer such conveniences. On the other hand buyers for these same departments complain that their trade stocks up at the 5 and 10 for its vacation needs!

COLOGNES ARE ALL YEAR SELLERS

Why are colognes given the big push only in the Summer? Remember about deodorants? They were a Summer item too, until some one decided an all-year sale might (?) be possible. Look where these are today! Recently papers in the Middle West carried half and quarter page ads to tell of a new bottle that was light in

weight, easy to carry and wouldn't spill. The results? Sales that exceeded even the dreams of the distributor. It was new. It was different. It was a needed item. Three good reasons.

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Throughout this area vacations began at Easter and will continue on through September. That is six months of steady selling which can be done on colognes and perfumes. The former are by far the most important. Outside of the great national publications there is little of new ideas (excluding deodorants) which receive national advertising by the firms which produce the cosmetic or distribute it. Advertising is directed to the buyers, and thru some of the present hook-ups the manufacturer pays for the ad the store uses. But isn't it time to create a national demand through such advertising irrespective of store name and create in women a desire to try the product?

Sales managers of important companies are now seeing red! "Haven't we done this for years? Think of the samples we've given away—our profits," but think of the profits that are left, gentlemen. And—the profits you've not even touched yet. Too often men forget what very curious people women really are—while adventurous they are exceedingly conservative.

Today a woman will not buy a bottle of cologne unless it is the exact type she likes. She may think it the scent she wishes when she tries it in the store. But after a while its odor changes. The test of a good fragrance is not the instant of application but what follows hours later.

One of the most successful ideas along this line has been carried out in two promotions by Lytton's, Chicago, which included a scented blotter in all of its charge bills. The time required for stuffing, delivery and the arrival on the woman's desk gave ample opportunity for the fragrance to have settled down to what she might expect of it. The result of the first promotion was considered excellent, and the second proved even better.

One store in this area enclosed an announcement in its charge bills that a certain gift would be awarded any customer presenting the slip—but in two days the supply was exhausted. More was to arrive and the customers were asked to return; then the clerks curtly informed customers that the offer was for two weeks only—and in this particular store cycle billing is used! The few cents that samples cost have proved dear, for many women are doing their purchasing elsewhere. Remember, this invitation went to the store's own charge list, not outsiders.

WHAT'S MOVING IN SALES

Dram perfumes are the most active in the perfume field. Colognes, when featured at a price as at Gimbel's, Milwaukee, proved strong. Mandel Brothers, Chicago and Glass Block, Duluth, have enjoyed a good reception of the semi-permanent preparation to keep lipstick where it is supposed to be. Home permanents in drug chains, in the smartest department stores and the popular priced shops are proving that the average business girl has learned how to handle this job.

Pretty pink in all its various names has had an initial acceptance, and now buyers want to see what re-orders may indicate. Every store has featured pink and conservative stores report it is strong. Kansas City has been stressing hormone creams, masques and liquids and finding the idea good.

Vacationers are accepting the manicure sets that combine nail make up with instruments; small cream sets in inexpensive cases are good; fitted cases of compact, lipstick and comb are steady in sale. The Golden Rule finds these are strong items, as does Hudson's, Detroit. Dayton's of Minneapolis has stressed the importance of powder base for Spring-Summer weather. This store and Carson's basement report that Shasta shampoo is excellent in sales and a new comer is Hudnut's egg shampoo.

Gift boxes, smart bottles, and all bath accessories are strong in daily sale. Soaps are freely offered and selling in good volume at today's price. The Fair's (Chicago) travel kits at \$2.99 continue to lead as a main aisle attraction. The long slender lipstick is new and is selling at stores in Indianapolis and Des Moines, while Omaha and Milwaukee feature it successfully.

Consumers want well packaged cosmetics by nationally known makers at prices which fit present incomes.



"It's their new miracle cream, want to take a chance?"

British Toiletries Exports

The British toilet preparations industry is making reasonable progress towards achievement of its export target set by the Government in the White Paper on exports.

The target fixed for mid 1948 for this industry was given as £400,000 and in the final quarter of 1947 the export values had risen to £250,000. This shows that the industry is making a very substantial contribution to export figures although it still has a considerable distance to go before reaching its target.

The situation depends very considerably, of course, upon the trend of world usage, and the readiness of importing countries to accept imports. Failure to reach the target set has been due, in many instances, rather to bans imposed by importing countries than to any real lack of desire for the goods. Complaint of manufacturers has been that too often the Government target failed to take such contingencies into consideration.

Discoveries in the Irone Field

DR. MAX STOLL*

WE thought it of some interest to compare the following facts with previous statements on this subject.¹

October 30, 1931, Ruzicka (Naef & Co.) applies for patent claiming—among others—process for the preparation of 1, 1, 2-trimethylcycloheptanone-7 and derivatives. Swiss patents 163,533,162,996, and application 87,005.

November 1, 1933, Ruzicka, Seidel & Schinz establish the rough formula of irone $C_{14}H_{22}O$.² In the same publication, they give for the first time the right 6-position to the methyl group in the ionone skeleton.

July 3, 1940, Ruzicka, Schinz & Seidel adopt the formula of β-irone,

stating that an important part of natural irone however must have a different, cycloheptanic constitution. On the same date, they publish a synthesis of 6-methyl- α and β -ionone and state that this mixture does not smell like irone.

February 22, 1941,⁵ Ruzicka & Brugger show that the irone synthesis of Merling and Welde was wrong.

September 1, 1941,6 Ruzicka, Seidel & Firmenich prove on the ground of physical constants that irone and α -ionone are very similar substances and isomerise purified natural irone in α - and β -irone.

1941,⁷ Gillam & West confirm the spectral data given by Ruzicka, Seidel & Firmenich, which had already been published in 1940 in the thesis of Firmenich.

December 29, 1942, Ruzicka, Seidel, Schinz & Pfeiffer publish the first part of the degradation of irone with ozone, the main result of which they had already published on September 1, 1933.

1942,° Gillam & West go one step backwards by proposing for natural irone a mixture of two ketones $C_{13}H_{20}O$ (thio-semicarbazones M.P. 180 deg.) and $C_{14}H_{22}O$ (M.P. 120-130 deg.). Ruzicka however had already proved in 1933, that these two ketones represent two isomeric forms of natural irone $C_{14}H_{22}O$.^{2, 11}

October 21, 1946, 18 Schinz (Firmenich & Co.) applies for patent claiming process for preparation of d1-6-methyl-ionone having the odor of irone.

1946, A. Bosshard (Thesis E.T.H., Zurich) describes the synthesis of the cycloheptanic product, and states that in spite of the fact that this product and natural irone have identical absorption-spectrums and their phenyl.

1,1,2-Trimethyl cycloheptanone -- Cycloheptanio product

semicarbazones have identical melting points, their odor is different.

May 20, 1947, ¹⁴ Givaudan (Naves) applies for patent claiming a process for the preparation of 1, 1, 2-trimethyl-cycloheptanone-7, the starting material for Bosshard's cycloheptanic product which Ruzicka once admitted to be natural irone.

August 31, 1947, Naves communicates at the meeting of the Swiss Chemical Society in Geneva a synthesis of a 6-methyl-α-ionone. Comparing its physical constants and Raman spectrum with those of natural irone, he finds great similarity between the two products, a result already obtained before by Ruzicka and co-workers with respect to α-ionone. But according to Naves, his 6-methylα-ionone does not possess the fine smell of irone. This is the only statement Naves ever made up to October 15, 1947 with regard to the odor of synthetic 6-methyl-uionone. He does not contest Ruzicka's cycloheptanic formula of irone. In this respect, it is very interesting to know that on one hand, Givaudan (Naves) deposited sealed memoirs claiming priority for the cyclohexanic product,16, 17, 18 while on the other hand, they apply for patent claiming priority for the cycloheptanic product only,14 thus showing that of the two last possibilities (Cyclohexa- or heptanic) which Ruzicka left open before June 28, 1946, Naves still gave the preference to the cycloheptanic product. There was however a third possibility not foreseen by Ruzicka in 1933, namely that natural irone consists in fact chiefly of 6-methyl-8-ionone, having a semi-cyclic double bond. This was discovered in 1946 by Ruzicka, Schinz & Seidel and published on October

October 15, 1947, 10 Naves publishes the content of his communication held before the Swiss Chemical Society, without thinking it worthy of protecting it by applying for a patent.

October 15, 1947,¹¹ Ruzicka, Schinz, Pfeiffer & Seidel publish the results of the second part of their work on the degradation of irone by ozone, establishing the correct constitution of natural irone as being a 6-methyl-bionone, a cyclohexanic and not a cycloheptanic product.

[•] Submitted by Firmenich & Co., Geneva, Switzerland.

October 15, 1947,12 Schinz, Ruzicka, Seidel & Tavel state that natural irone is a mixture of a, \beta- and \delta-irone, and describe the synthesis of 6-methyl-a-ionone, saying for the first time, that this product has the odor of natural irone.13 This fact was not at all self-evident, since the smell of \beta-irone (as stated by the above authors) is nearer to that of ionone than that of irone. The proportions of a, \beta- and \delta-irone present in natural irone have not yet been published. & irone accounts for 75 per cent of the product. (Refer to papers yet to be published in the Helvetica Chimica Acta on this subject.)

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December 1, 1947,18 Ruzicka, Seidel & Brugger give further experimental evidence of the cyclohexanic constitution of irone.

December 1, 1947,16, 17, 18 Naves & Bachmann publish studies and a summary on irone. The conclusion of the first study is that irone is a single, definite individual body, closely related to a-ionone. The second study admits the hypothesis that natural irone is a 6-methyl-aionone. The third study confirms this hypothesis by comparing the ramanspectra of both products, but without any chemical evidence. In the summary, 19 Naves claims the priority over Ruzicka for having found the main constituent of natural irone and for having synthesized

But according to Ruzicka and his school,12 natural irone is a mixture of α, β-δ-irone, in which the latter largely predominates. Therefore irone is not a single individual body, nor is the predominating constituent a 6-methyl-α-ionone. One can therefore not speak of a competition as to priority between Ruzicka & co-workers, and Naves. 19 Ruzicka, Schinz & Seidel have found natural irone to be a mixture of small quantities of a and \$-irone and large quantities of &irone to which they gave the correct formula, whereas Naves has found natural irone to be a single individual chemical body to which he gave the wrong formula of a-irone. 17, 18 The reason why Naves found α-irone instead of δ-irone is not because the natural irone on which he was working was especially rich in a-irone, as he thought, but was due to an erroneous appreciation of his experimental work.20 In the experiment which should have decided between the hexa- and heptanic-cyclo constitution of irone, Naves reduced irone to dihydroirol whose non-conjugated double bond he believed remained unchanged. He overlooked the work of Koster⁶ and Schinz,¹² who showed that the treatment of irone with alkali and alcohol could remove the double bond from the & to the a- and &-position. Hence the failure of Naves ramanspectrum analysis is due to the incorrect constitution of dihydroirol whose analysis by this means is inconclusive 21

The 6-methyl-ionone which Naves synthesized17 is not. the same as the one synthesized by Schinz in spite of its having identical densities and refractions. In the first

place the odor is different, if the statement made by Naves before the Swiss Chemical Society is correct; secondly, the melting points of the phenyl-semicarbazones differ by 8 deg.; thirdly, the steric uniformity is We very different and finally, the reaction with alkali, according to Koster, is not the same.

Naves prepared his product with concentrated sulphuric acid, whilst Schinz worked with 85 per cent phosphoric acid, conc. sulphuric acid having given in his hands nearly quantitative yields of β-irone. Before Schinz published his work on α-irone, Naves never mentioned either in his sealed memoirs or elsewhere the most important fact, namely the wonderful odor of this new compound. And yet, contrary to what he writes, "industrial considerations" ought to have made him point out this important fact, especially in his sealed memoirs. Besides, why speak of "industrial considerations" in relation to the publication of a synthesis of a-irone, for which no patent has been applied for?

With regard to the priority of the synthesis of dl-airone, there exists no competition between Schinz, Ruzicka, Seidel and Naves. The latter has synthesized a non-irone smelling 6-methyl-ionone, just as did Ruzicka previously, while Schinz finally succeeded in preparing a really fine smelling d1-6-methyl-q-ionone.12

1 Naves: The Perfumery & Essential Oil Record, 38, 366 (1947; The Givaudanian, Nov., 1947; American Perfumer, Jan., 1948—Page 43
2 Helv, 16, 1443 (1933)
3 Helv, 23, 935 (1940)
4 Helv, 23, 935 (1940)
5 Journal für praktische Chemie, £58, 125 (1941)
7 Nature, 148, 114 (1941)
8 Helv, 24, 1434 (1941)—Compare Koster, B. 77, 559 (1944)
7 Nature, 148, 114 (1941)
8 Helv, 25, 188 (1942)
9 Soc. 1942, 97, 483
10 Helv, 30, 1807 (1947) Sealed 28, Vl. 46
12 Helv, 30, 1807 (1947) Sealed 28, Vl. 46
13 Swiss applications No. 16422, 16423 (Firmenich)
14 Swiss applications No. 16422, 16423 (Firmenich)
14 Swiss applications No. 16422, 16423 (Firmenich)
15 Helv, 30, 2168 (1947)
16 Helv, 30, 2168 (1947)
17 Helv, 30, 2168 (1947)
18 Helv, 30, 2221 (1947) Sealed 10, Vl. 43
17 Helv, 30, 2231 (1947) Sealed 10, Vl. 43
18 Helv, 30, 2241 (1947) Sealed 10, Vl. 43
19 Helv, 30, 2221 (1947)
20 See Ruizicka and co-workers' Helvetica Chimica Acta, Volume 11, 1948.
21 Carefully reduced dihydroirol shows also the frequency of 8-irone. See future papers on this subject in Helv. Chim. Acta.

British Freeze Prices

Perfumery and toiletry requisites figure strongly in the list of goods which the British Government has 'frozen' as the first step to combat inflation. According to the Board of Trade, some 160 items in every day use and their accessories are involved in the 14 Orders which aim at freezing prices at the levels which applied in December-January. These Orders (and the new lower prices) took effect March 15th. The Government has admitted that mere fixing of prices at a given level will not limit profits (which is one of the main ideas behind the scheme) since more efficient production of goods would permit a higher level of profit for some firms, than

The main features of the Orders provide that, within a wide range of goods, there will be no large increases in price or profits of a nature likely to encourage similar demands for increased wages by workers forced to buy at these higher prices. The Orders will also control the Cost of Living figure.

Some exceptions are permitted.

Dackaging



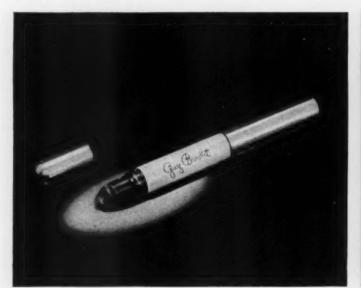
CHEN YU

CHEN YU: Chen Yu introduces "Coral Fan" lipstick and nail enamel. The new shade is packaged in a fanshaped box. The black box is decorated with an original landscaped fan reproduced in a coral tone.

DANA: Dana's Gay Bandit is shaped like a fountain pen. At one end, shielded by its gold cap, a plastic applicator is tailored to fit, to follow, and define the lips with a controlled amount of color by just a slight twist of the swivel base.

SHULTON: Shulton has come up with a masculine deodorant smartly packaged in a red tube anchored by a wire catch in a red-lined box.

DANA



438 May, 1948

SHULTON



The American Perfumer

HOUSE OF GOURIELLI

HOUSE OF GOURIELLI: Gourielli's Five O'Clock Masque is presented in a pretty blue apothecary bottle. The small opening on the jar permits the pouring of just the amount desired, and minimizes drying-out.

WOODBURY: The new "rope" swirled Woodbury Cold Cream jar is eye appealing. With a metal screw-on cover and a white lettered raspberry label, the new jar comes in three sizes.

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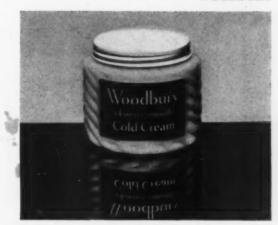
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PICOT: "Le Train Bleu" a perfume by Picot is presented in a hand polished cut-glass bottle set in the white quilted satin lining of the little box. The package is ivory white relieved with a gold filigree design.

HARRIET HUBBARD AYER: Harriet Hubbard Ayer's Maypole package features Yu cologne. The brightly colored ribbons fly from the bottle top.



WOODBURY

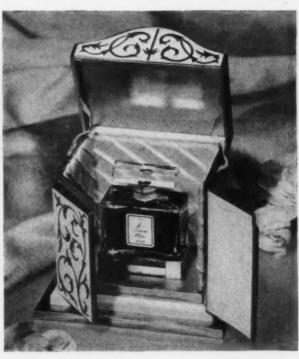


PICOT

HARRIET HUBBARD AYER



& Essential Oil Review



May, 1948 439

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A NEW DEVELOPMENT IN VEGETABLE STABILIZERS

Tabac Perfumes

J. V. W. WIGGERS DE VRIES*

A FANCY perfume, which is always held in high esteem, is the so-called tobacco flowers, or fleurs de tabac. The perfume is designed to reproduce the heavy, fragrant smell of cured and flavored Egyptian and Turkish cigarettes. Although this should be presented by a perfume of a fixed type, demand changes under the influence of fashion and the lighter and flowerier perfume is liked today, rather than the heavy, oriental type demanded some years ago.

It should be understood that in the data given below, quantities given are proposed and are not meant to be invariable. They can be changed according to taste.

BLENDING TABAC PERFUME

The best starting point in blending a tabac perfume is to tobacco absolute. This, upon dilution, has an extremely fine and aromatic odor. It is a product not often encountered in the trade, and as the production by means of a volatile solvent is not very large, the price is high. However, a small amount included in a formula will make its influence felt, and give an exquisite effect. Up to 8 per cent may be used if the price permits. As a base, coumarin (from 10 to 20 per cent), bergamot (10 to 25 per cent), rectified birch tar oil (0.2 to 2 per cent), dary sage oil (8 to 15 per cent), and methylionone (5 to 15 per cent), may be used.

The familiar odor of coumarin can be changed by replacing it wholly or partially with Tonka beans absolute. The latter is much softer and more natural, though, of course, not so powerful. A small amount of hay absolute (I per cent) may also give interesting results. Together with birch tar oil rectified, which is an indispensable product in this perfume type, some isopropylquinoline or p. tertiary butyl m. cresol (the well-known base of Russian leather perfume) may be used. These two substances also have an odor recalling that of smoke, and give a new and original note.

Among the blenders and modifiers may be named: Phenylacetis acid and its methyl or ethyl ester (amounting together to 3 to 7 per cent), orris oil or concrete (2 to 7 per cent), sandalwood oil E.I. or Santalol (5 to 10 per cent), and dimethylhydrochinone (up to 20 per cent).

The latter might be used together with resorcine dimethylether (a product used in the flavoring industry for nuttypes), which will give inimitable and original effects. Dihydrocarveol or its acetate can also be used. The former should be kept below 5 per cent although slightly larger amounts are permissible of the latter.

FLOWERY NOTE

fumer'

To impart the flowery note, the use of rose in the form

of absolute and otto is imperative. The amount of the two together should not run over 8 per cent. Useful also are jasmine and orange blossom absolute, or neroli (amounting together 2 to 4 per cent). Everlasting absolute, which blends remarkably well with the base, sweetens the perfume. It may be used up to 4 per cent.

For musks, it is best to use up to 3 per cent of ambrette, together with the same amount of musk ketone or musk exaltolide 20 per cent.

Fixation does not offer much of a problem since large amounts of coumarin, dimethylhydrochinone, etc., are used and they are good fixatives. Small amounts of castoreum, vanillin and heliotropin may be used. The former blends especially well in this type of perfume.

Methylmonylacetic aldehyde and particularly the too little used tetradecyl aldehyde are recommended to obtain the top note. Together they should amount to 0.2 per cent.

The formula for a rather expensive and not too light tabac perfume follows:

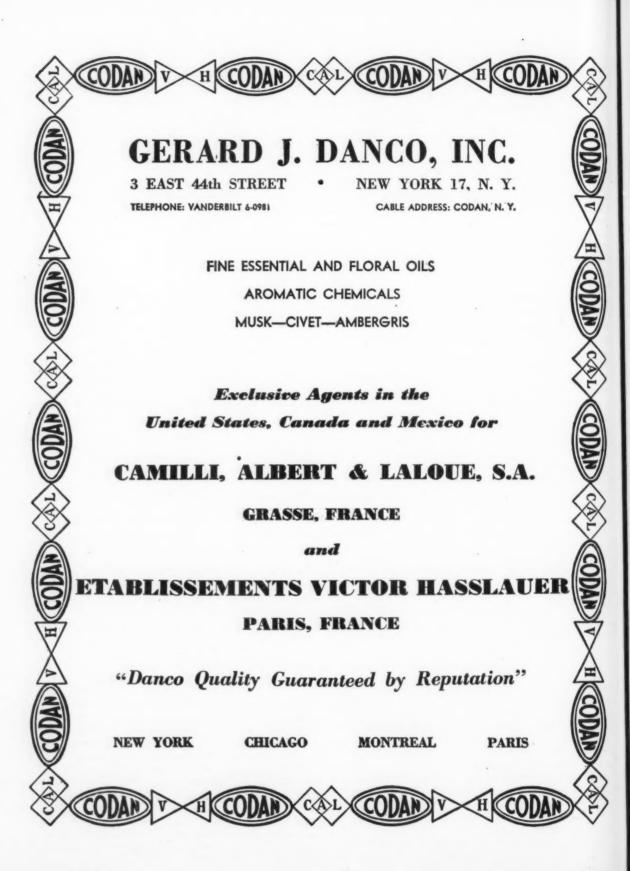
Bergamot oil	175	Musk ambrette	20
Coumarin	100	Jasmin absolute	15
Methylionone	100	Methylphenylace-	
Clary sage oil	100	tate	10
Tonka absolute	100	Orangeblossom	
Cinnamic alcohol	75	absolute	10
Sandalwood oil E.I	50	Everlasting absolute	5
Dimethylhydroqui-		Methylnonylacetic	
none	50	aldehyde 10 per	
Rose absolute	35	cent	5
Orris oil	30	Birchtar oil rect	5
Exaltolide 20 per cent	30	Castoreum resinoid	21/2
Tobacco absolute	30	Tetradecylaldehyde	21/2
Rose otto	25	-	/ 4
Phenylacetic acid	25	1	000

U.K. Toilet Goods Control

Controls upon the manufacture and supply of toilet preparations are to be continued in the United Kingdom until June 1948 when the position will be reviewed again, states the British press. The rate of licensing from January 1, 1948, to June 30, 1948, is to remain at 75 per cent of standard-period (June 1, 1939, to June 31, 1940) production, and the export bonus scheme is to continue in its present form.

The Board of Trade decided to extend the date of validity of the licenses held by manufacturers and to increase the value of those licenses by an amount equivalent to the normal quota for the period ending June 30, 1948

^{*} Jean A. duCrocq Chemical Works, Bussum, Holland.



Technical Abstracts from Scientific Literature

Essential fatty acids and human nutrition. A. E. Hansen (Univ. Texas School of Med., Galveston) and G. O. Burr. J. Am. Med. Assoc. 132, 855-9 (1946). In regard to clinical observations made thus far with human subjects, there is no evidence to indicate that a lack of the essential fatty acids produces a disturbance in growth, hematuria, kidney lesions, impaired reproduction, leetation or sterility, which abnormalties are attributed to the dietary lack of either linoleic or arachidonic acid in small experimental animals. However, as one of the most characteristic findings in all animal studies is an alteration in the appearance and character of the skin, it is perhaps not surprising to find a possible relationship between dietary fat and the skin in some human subjects. (Through The Amer. Oil Chem. Soc., 24, 132, 1947.)

A qualitative method for detecting surface active agents. L. F. Hoyt. A new method is presented for the qualitative detection of small amounts of surface active agents which is generally applicable to all types, i.e., anionic, cationic, and non-ionic. This method is based on the solubilization in aqueous solution of certain oil soluble dyes, particularly Brilliant Oil Blue BMA. (Through The J. of the Amer. Oil Chem. Society, 24, 54, 1947.)

Phase study of commercial soap-Alkaline electrolyte water—Systems, Reynold C. Merrill. A phase study of commercial mixed soap-water-electrolyte systems was made using sodium chloride and nine salts industrially important as soap builders. The data cover soap concentrations to 50 per cent, electrolyte concentrations to 27 per cent, and temperatures to 180 deg. C. The salts used were sodium chloride, carbonate, and tetraborate, trisodium phosphate, tetrasodium pyrophosphate, Calgon (sodium hexametaphosphate), sodium metasilicate, sodium silicates of SiO₂/Na₂O ratios by weight of 2.46 and 3.93, and a potassium silicate of SiO_a/K_aO ratio by weight of 2.04. The solubility of the soap in solutions of these salts and their effect on the transition from crystalline to liquid crystalline soap varies widely both on weight and molecular bases. The order of increasing effect differs with concentration and temperatures; however, sufficient regularities exist to enable predictions to be made of the phase diagrams for other soaps and at other concentrations. (Through Ind. and Chem. Engineer., 39, 158, 1947.)

Coal tar emulsions. Timoteo A. Estevez. Rev. facultad cienc. quim. (Univ. nacl. La Plata) 17, 51-64, 1942. Tinctures of quillaja with coal tar prepared by the methods of various pharmacopeias give with water emulsions of the alcohol-soluble components of the tar of the oil-in-water type all of similar degree of dispersion and stability. The British pharmacopeia gives the most recommendable method. The coal-tar fraction soluble in 95 per cent ethyl alcohol gives a good emulsion by shaking at a ratio of 2 per cent with an aqueous saponin solution. Triethanolamine oleate gives good 4 per cent aqueous emulsions. (Through C. A., 38, 3418, 1944.)

Hydrolysis of dehydrated sodium phosphates. Russell N. Bell. When sodium triphosphate hydrolyzes, one mole each of ortho- and pyrophosphate is formed. In aqueous solutions of hexametaphosphate two reactions take place simultaneously; part is hydrolyzed directly to orthophosphate, and part is depolymerized to trimetaphosphate which then hydrolyzes slowly to orthophosphate, triphosphate is formed as an intermediate. In the presence of an excess of alkali, trimetaphosphate is converted entirely to triphosphate. Pyrophosphates hydrolyze directly to ortho-phosphates. Hydrolysis data confirm the fact that tetra and septaphosphates are mixtures. (Through *Ind. and Chem. Engineer.*, 39, 136, 1947.)

Chemical nature of allergens. Rhoden and Sutherland say that until recently most authorities have held. that all allergens are protein in nature. In 1942 one of the authors, in seeking to isolate the allergen of house dust, obtained a remarkably active substance from an aqueous extract of house dust by adsorption on benzoic acid, and this was found to give no qualitative reactions for protein. This suggested that it would be of interest deliberately to remove all proteins from extracts of allergens and to see whether the residues showed allergic activity. The authors found that egg white, castor bean and linseed after treatment with several of the classic protein precipitants retain their power to produce skin reactions on hypersensitive subjects. Certain proteins, however, such as ovomucoid, are not precipitated by many of the usual protein precipitants. The difficulty of complete separation of mixtures of complex organic compounds is emphasized. (Through J. of the Amer. Med. Assoc., 133, 728, 1947.)

mer

FLAVORS

Sodium Glutamate

MORRIS B. JACOBS*

E have been taught that there are four fundamental tastes, namely, sour or acid, bitter, salty, and sweet. There are, however, physiologists and chemists who have given considerable thought to the subject of taste who believe that there are additional fundamental tastes. Thus the pungent taste of ginger and pepper and the compounds to which their pungency is attributable, zingerone, gingerol, and piperine, is, according to Dyson, an independent taste sensation.

In an analogous manner, it is the belief of some authorities that the "meaty" taste is also an independent taste sensation. One of the principal compounds said to give this sensation is sodium glutamate.

MEAT FLAVOR

There is little doubt, however, that even if the meat flavor is a true sapid sensation, there is something more required than the mere sensation given by amino acids and their derivatives for the full development of the meat flavor. The cooked meat flavor of a roast is due in large part to the application of heat to meat protein in the presence of fat.

Commercial sodium glutamate has a distinct flavor particularly after its addition to food mixtures like canned soup, dry soup mixes, prepared noodles, and the like. It makes these products much more satisfying than if they were consumed without the addition of this product. Crocker attributes this feeling of satisfaction to a tactile effect which may last for as long as an hour.

It is to be stressed that though sodium glutamate and analogous amino acid derivatives have a meaty flavor to which the meat taste sensation is ascribed, they are not responsible for the odor generally associated with the meat flavor.

 Adjunct Professor of Chemical Engineering, Polytechnic Institute of Brooklyn. The degree of purity of sodium glutamate has a marked influence on its flavor. For example, Howe found that he could not accept the common belief among the Chinese and Japanese that the meat flavor was due solely to sodium glutamate because after having purified this substance by many recrystallizations, the purified material did not elicit any meaty sensation response either in dry form or in solutions of high molarity when submitted to a number of judges.

A similar result was noted by Olcott and Brother. They state that the taste of most samples of sodium glutamate is meat-like but that a very highly purified sample of this material has a more delicate flavor than that found in the customary commercial samples which lead them to believe that the meat-like flavor may be attributable to an impurity.

FLAVOR POTENCY

If solutions of sodium glutamate, salt, and sugar are prepared in known dilutions, then it has been shown that the taste of sodium glutamate is detectable when diluted 3000 times as compared with 400 times for salt and 200 times for sugar. Thus the taste sensation elicited by sodium glutamate is 15 times greater than that attributable to sugar and 7 times greater than that of salt.

Glutamic acid does not have much flavor strength but its monosodium salt does. This would appear to indicate that the flavor is attributable to the glutamate ion, rather than to the unionized compound. It has been shown that the addition of acid to a solution of sodium glutamate results in a decrease of the apparent meaty taste. This would result from the displacement of the ionic equilibrium by the formation of more unionized glutamic acid.

If a solution of common salt and sodium glutamate is prepared in which the salty taste predominates, the sodium glutamate taste will appear when this solution is diluted.

It may well be that it is only when sodium glutamate

is tasted along with other materials that the potency of glutamate taste is increased, for these other food materials may have a synergistic action on the sodium glutamate.

HISTORY

At the turn of the century, protein hydrolyzates were used extensively for the flavoring of food and it was deemed by some Chinese that it was the use of these protein hydrolyzates that made a vegetable diet palatable.

In 1908 the production of sodium glutamate began and it was imported by China from Japan under the name *Ajinomolo*. Subsequently large amounts were prepared from wheat gluten in both Japan and China and many fanciful names such as *Ve-tsin* meaning concentrate of flavor, "Powder of the Goddess of Buddha," "Fresh Flavors Crystals," "Essence of Taste," and "Ho Ho Powder," meaning powder of harmony, were given to it.

d-Glutamic acid, from which sodium glutamate may be prepared by the addition of adequate amounts of sodium hydroxide, was probably first isolated by Ritthausen in 1866. He used sulfuric acid to hydrolyze wheat gluten. Klasiwetz and Haberman prepared it from casein in 1873 using hydrochloric acid. It was not, however, until 1908 as noted above that the meat-like flavor of such hydrolyzates was associated with the sodium salt of d-glutamic acid, principally by Ikeda who isolated it from the seaweed Luminaria japonica. He filed for a United States patent in 1909. A United States patent was granted to a German chemist, Graf, in 1912 for a product which was a solution of an impure sodium glutamate. Subsequently Ikeda received patents from the United States in 1926 and 1928 for the preparation of the acid by electrolytic methods.

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Sodium glutamate, NaOOCCH₂CH₂CH(NH₂)COOH, is also known by the names, d-monosodium glutamate, "mono," vegetable protein derivative, and the like. It is a white crystalline powder with a peptone-like odor, a pleasant salty taste, and the commercial product has a strong meat-like flavor. The commercial product is about 95 per cent pure. Sodium glutamate is very soluble in water but it is only sparingly soluble in ethyl alcohol. The aqueous solution is virtually neutral to litmus. It is slightly levorotatory.

Because of its close relationship to glutamic acid,

HOOCCH₂CH₂CH(NH₂)COOH, α-aminoglutaric acid, it is well to point out that the carbon to which the amino group is attached is asymmetric and therefore this acid is optically active and occurs in two forms. This is of great commercial interest since it is the dextrorotatory acid isomer with which the glutamic taste or meaty taste is associated. The levorotatory isomer has virtually no flavoring power. This lack of flavoring power of the levo compound has influenced the manufacture of a synthetic material since the synthetic material is racemic, that is, it is a mixture of both forms and the separation of the two forms has not, as yet, proved commercially feasible.

Because of the difficulty just noted, sodium glutamate is made from glutamic acid obtained from natural sources. It is instructive to list the possible sources of this substance as given in common references in the literature.

Vegetable sources	Protein	Glutamic acid per cent
Barley	Hordein	43.2
Corn	Zein	31.3
Corn	Glutelin	12.7
Oats	Mixed proteins	18.4
Rice	Glutelin	14.5
Rye	Gliadin	33.8
Rye	Prolamin	38.0
Wheat	Gliadin	43.7
Wheat	Gluten	24.0
Wheat	Glutenin	25.7
Wheat	Leucosin	6.7
Cottonseed	Globulin	17.6
Hemp	Edestin	19.2
Cow pea	Vignin	16.9
Navy bean	Phaseolin	14.6
Pea	Legumin	17.0
Pea	Legumelin	13.0
Pea	Vicilin	21.3
Peanut	Arachin	19.5
Potato	Tuberin	4.6
Soybean	Glycinin	19.5
Velvet bean	Stizolobin	14.6
Almonds	Amandin	23.1
Coconut	Globulin	19.1
Brazil nut	Excelsin	12.9
Steffen's waste	Mixed proteins	0-15
Animal source	Protein	Glutamic acid per cent
Beef	Muscle	15.5
Chicken	Muscle	16.5
Egg	Ovalbumin	13.3
Egg	Vitellin	12.9
Halibut	Muscle	13.7
Gelatin	Gelatin	5.8
Milk	Casein	21.8
Milk	Lactalbumin	12.9
Scallop	Muscle	14.9
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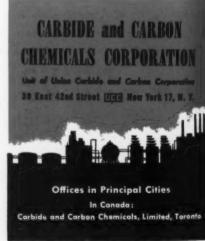
Such medicinals as the sulfonamides, penicillin, streptomycin, anti-histamines and aspirin, either comfort the patient or make the control of his illness far more certain and effective. In each

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The American Perfumer

It is clear that glutamic acid is a constituent of major significance in many protein materials.

The major commercial sources for the manufacture of glutamic acid and its sodium salt are wheat gluten, Steffen's waste, and casein. Other patented and proposed sources are soybean wastes, sugar wastes, and corn zein. In a succeeding article, the manufacture of sodium glutamate will be described and its uses illustrated.

of fruit so that the fruit itself could not be used as a source materials. Methods are now being developed for its synthesis.

The Syntomatic Corporation is expanding its flavor department.—M.B.J.

Flavored Notes

Several aromatic chemicals which have been devloped only within the past two to five years are now in commercial production and are available. Among these and the uses for which they are suggested are α -ethyl butyryl acrolein and α -methyl β -furyl acrolein which have been proposed for cola, cinnamon, and chocolate flavors and cyclohexyl cinnamate suggested for peach, apricot, and cherry formulations.

A new line of powerful flavors is being produced by Firmenich and Co., successors to Chuit, Naef & Co. These concentrated flavors are used in the ratio of 0.16 ounce per 100 pounds of boiled goods or sirup or per 12 gallons of spirit. Flavor fidelity appears to be achieved.

You may recall that methyl β-methylthiopropionic acid was isolated from the vacuum distillate of pineapple. It was present only to the extent of 1 gram per ton



Cacao Cultivation, Gold Coast

It is impossible to estimate accurately the area of land under the cultivation of cacao in the Gold Coast of Africa. Production is entirely in the hands of small farmers, and no statistics are kept. However, average annual production for the 5-year period immediately before the war was roughly 250,000 tons. It is generally assumed that 1 ton of cacao is obtained from 4 acres, so there would appear to be about 1,000,000 acres under cultivation. The annual cash income from cacao received by the agricultural community runs into millions of pounds and is the basis of the country's economic life.

The cacao season in the Gold Coast is divided into two portions. The main crop is gathered from August to February and the midcrop from April to August. The 1946-47 main crop was disappointingly small, and exports reached only 165,812 tons with an additional 11,000 tons sent overland to French Togoland for export from Lomo. The reduced yield was attributed to the disease known as swollen shoot, and also to the drought in the Eastern Province where the beans were smaller than ever before recorded. The 1947 midcrop totaled 15,100 tons; the 1945-46 crop was 220,000 tons.

The main 1947-48 crop was slow coming in because of the heavy rainfall in September which caused many early ripening pods to become infected with "black pod." Abnormal rainfall was registered in October and early November, yet the latest estimate of the main crop is slightly under 200,000 tons.

The seriousness of the swollen-shoot disease is indicated when it is reported that during 1947, 2,500,000 cacao trees were destroyed in an effort to curb the disease, and this, according to the Department of Agriculture, is a small percentage of what must be done.

The Government's cacao-buying agency, the Gold Coast Cocoa Marketing Board, set a price of 40 shillings a load (of 60 pounds) for the 1947-48 crop. This compares well with the 15 shillings a load paid for the 1945-46 crop and the 27 shillings a load paid for the 1946-47 crop. (The cacao year runs from October 1 to the following September 30.)

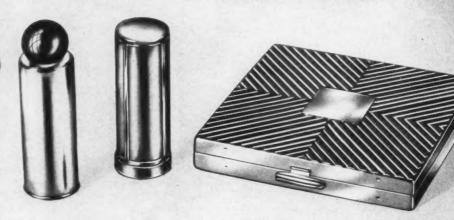
The difference between the price paid to the farmer and the amount realized on sale abroad, minus the expense incidental to the marketings, is placed into a stabilization fund for the benefit of the farmer.

Cacao exports dropped from 236,316 tons in 1946 to 177,138 tons in 1947.

According to both the Department of Agriculture and the Gold Coast Cocoa Marketing Board, these figures are misleading. It was pointed out that the 1946 exports of cacao were much larger than the crop for that year warranted because there was a large carry-over from the preceding year which had not been shipped because of lack of shipping space.—Foreign Commerce



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Commercial Fatty Acids

ROBERT F. BROWN*

THE fatty acid industry is getting into operation still newer facilities and new methods of operation which will give users of fatty acids a much broader selection of types and fractions. In many cases these new types will be custom-designed to fill specific needs.

It is evident that maximum progress in this direction will depend largely upon cooperation between the producer and the user in determining utility as a function of the composition of these newly modified fatty acids. The users' interpretation of practical performance of such fatty acids might be sounder and more easily derived if familiar with the actual compositions of the new commercial fatty acids as well as of those fats, oils, and fatty acids which have been in use. Let us, therefore, consider:

- Definition, Classification, and Properties of fatty acids combined in naturally occurring fats and oils.
- Composition of naturally occurring fats and oils in terms of their constituent fatty acids.
- Methods of determining actual composition of fatty acid mixtures.
- Commercial methods of processing, modifying and separating fatty acid mixtures.
- The commercial utility of special modifications and fractions.

Fatty acids might be defined as a series of monocarboxylic acids differing primarily with respect to:

- 1. Hydrocarbon chain length (molecular weight).
- Degree and position of unsaturation in the hydrocarbon chain.

Castor oil fatty acid (rincinoleic acid) is a notable ex-

ception having the hydroxyl group on the 12th carbon atom of the hydrocarbon chain.

The fatty acids contained in the most common fats and oils are tabulated in Table 1.

Table 1

FATTY ACIDS CONTAINED IN MOST COMMON NATURAL FATS AND OILS

No. of Carbon Atoms in Chain	Saturated	Mono-Un- saturated		Poly-Un- saturated
6	Caproic			
8	Caprylic			
10	Capric			
12	Laurie			
14	Myristic			
16	Palmitic	Palmitolei	e .	
18	Stearie	Oleic	Linoleic l	Linolenic
20	Arachidic	Gadoleic	. A	Arachidonic
99	Robonio	Empio	-	Tunanadania

The molecular structure of behenic acid is conventionally illustrated along with oleic and linoleic in the following:

CONVENTIONAL ILLUSTRATION OF FATTY ACID STRUCTURES

Behenic Acid

Oleic Acid

Linoleic Acid

Ochemical Sales Division, Emery Industries, Inc. From a paper presented before the Soap and Detergent Manufacturers' Association, January 27, 1948. This article will be continued in the June issue of THE AMERICAN PER-TRACE.



Meadow Bouquet

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What are some of the basic physical and chemical differences among these fatty acids?

 Melting points of saturated acids increase with increasing chain length or molecular weight.

Solubilities of soaps prepared from saturated acids decrease with increasing chain length or molecular weight.

3. Vapor pressure (at any given elevated temperature) of saturated acids decrease with increasing chain length, or in other words, boiling point (at any given reduced pressure) increases with increasing chain length. This difference from acid to acid permits their separation by fractional distillation.

4. Vapor pressure of saturated as well as unsaturated acids of the same chain length are practically identical, hence, separation of oleic from stearic, e.g., by fractional distillation is impossible.

 Solubility of acids of the same chain length in polar type solvents, such as methanal, increase sharply with increasing degree of saturation; hence, their separability by fractional crystallization.

6. Solubility of soaps prepared from acids of the same chain length increase with increasing degree of unsaturation, the greatest difference being between saturated and mono-unsaturated. For example, soaps of oleic acid are much more soluble than those of stearic, whereas those of linoleic are only slightly more soluble than those of oleic.

7. Oxidation tendency increases with degree of unsaturation. The behavior of complex mixtures of fatty acids is not always predictable from a knowledge of properties of single acids and simple binary mixtures. The so-called "eutectic" behavior of mixtures of solid acids is rather commonly known.

Mixtures of unsaturated acids, liquid at normal temperatures, show similar behavior although this is not generally recognized because of their much lower melting and solidification points.

This basic behavior of mixed acids reflects similarly in the behavior of many derivatives of the mixed fatty acids and undoubtedly has some influence on soap properties.

This discussion could be vastly complicated by considering the many different so-called "isomers" of the unsaturated acids. Briefly we recognize "position" isomers of oleic acid which differ from oleic in melting point

due to the different location of the double bond. Also geometric isomers are possible; e.g., elaidic acid is a high melting geometric isomer of oleic. In this fashion there are four possible isomers of "normal" 9-12 linoleic acid each slightly different from the others in properties. Position isomers of linoleic acid are likewise possible. These varied forms of the acids are not normally of major consequence in connection with commercial fatty acids but must always be recognized by the manufacturer and users as a potential factor. The isomerization of normal acids to these varied forms depends upon the method of processing. Incomplete hydrogenation, e.g., has a tendency to form iso-oleic acid in some manner.

NATURALLY OCCURRING FATS & OILS

Having briefly reviewed some of the elementary chemical and physical properties, let us now see which of these acids are combined in the more common naturally occurring fats and oils.

From Table 2 it is quite evident that the domestic fats and oils of major commercial importance are composed primarily of palmitic, stearic, oleic, linoleic, linolenic, plus minor quantities of myristic (see tallow, cottonseed, soyabean, corn, peanut, and linseed). The single major exception to this statement is the fish and marine animal class of oils. These oils differ from the domestic animal and vegetable oils in that they contain abundant quantities of saturated and unsaturated acids of higher chain length.

The foreign fats and oils of major commercial consequence to this country include coconut, babassu, palm, palm-kernel, rapeseed, and the fast drying oils such as tung and oiticica, which are of far greater interest to the paint and resin industries. The abundance of lower molecular weight acids present in coconut, babassu, palm kernel are of major concern to the soap industry since there is no domestic source of lauric and myristic acids which impart such unique properties to soaps and synthetic detergents.

It is interesting to note that, however simple this question of fatty acid composition may seem, the question of omponent triglyceride composition is quite complicated. This is due to the very great number of different triglycerides which can be formed from only a few fatty acids. For example, one might be astounded at the number of different triglyceride entities potentially present in tallow.

A specific example will further illustrate this point.

Table 2
COMPOSITIONS OF NATURAL FATS AND FATTY OILS

							ara orac			
Fatty Acid	Babassu	Coconut	Cotton- seed	Linseed	Olive	Palm	Palm Kernel	Soya	Tallow	Herring
Caprylic	6.2	9.0	-	-	-	_	3.0	-	-	-
Capric	3.0	8.0	-	-	-	-	6.0	-	-	-
Laurie	46.5	47.0	-	-	-	-	50.0	-	-	_
Myristic	21.0	20.0	0.5	-	0.2	0.5	15.0	_	2.0	6.0
Palmitic	7.0	7.5	21.0	4.0	8.0	40.0	8.0	6.0	28.0	12.0
Stearic	16.0	3.5	2.0	5.0	2.0	5.5	2.0	4.0	21.0	1.0
Oleic	-	4.0	32.0	11.0	84.6	45.0	15.0	34.0	45.0	8.0
Linoleic	_	-	44.0	50.0	5.0	9.0	-	53.0	4.0	8.0
Linolenic	-	-	_	30.0	-	-	-	2:0	_	-
Gadoleic	_	-	-	-	-	-	-	-	_	12.0
Arachidonie	-	-	_	-	-	-	-	-	-	6.0
Erucie	_	_	_	-	-	_	_	_	_	7.0
Clupanodonic	_	-	-	-	-	_	-	-	-	19.0



Here's the short cut to smart packaging an artistically designed Swindell stock bottle plus your distinctive label.

Shown here are four of the many stock bottles available for quick delivery in popular sizes ranging from 1/8 ounce to 16 ounces.

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200 FIFTH AVENUE, NEW YORK
ROBERTO ORTIZ, HAVANA, CUBA



C-39



When you think of bottles think of

Swindell

L-33

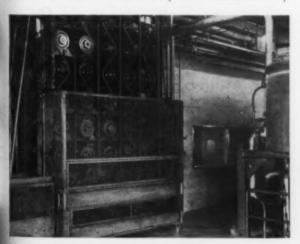
Triolein, tri-linolein, and mixed glycerides of these two acids can be separated from tallow or grease only to the extent that they occur as such. A considerable portion of these two acids are present in the form of mixed glycerides with the saturated acids. Consequently, pressed lard oils inevitably contain substantial quantities of saturated acids. If the tallow or grease is first split into its component fatty acids the oleic and linoleic can then be separated from the saturated with relatively high efficiency. Should one wish to obtain the triglycerides of these acids re-esterification with glycerine is entirely feasible and is practiced commercially.

COMPOSITION OF FATTY ACID MIXTURES

It would be futile to discuss properties and utility of commercial fatty acid mixtures as a function of composition unless there were reliable methods of determining composition.

Common characteristics such as iodine value, acid value, saponification value and titre serve quite well as uniformity controls and reveal to some degree clues as to composition. Fractional distillation of the fatty acid mixtures or their methyl esters, however, is the only certain method of determining composition in terms of chain lengths. This requires properly designed laboratory fractionating columns. Each constant boiling fraction represents a specific chain length class. If the fraction is completely saturated as shown by a zero iodine value it is established as the saturated acid of that particular chain length. Suppose the iodine value of any fraction disclosed the presence of unsaturated acids. That leaves one completely in the dark as to whether the iodine value is due to mono, di, or polyunsaturated acids.

Until World War II the thiocyanogen method was the only means of estimating mono vs. di or polyunsaturated acids. It was not reliable and particularly difficult to reproduce from laboratory to laboratory. Through the necessity of war-time production of synthetic rubber and ultra-violet spectrophotemetric method was evolved. The absorption of each of several specific wave lengths is measured and can be attributed to specific polyunsaturated fatty acids. Thus the amount of di-unsaturated, tri-unsaturated, etc., can be accurately determined. Then by



The Emersol Process of separation of liquid from solid acids consists simply of continuous fractional crystallization of solid fatty acids from solvent solutions.

difference the amount of mono-unsaturated can be computed accurately from iodine value. This method is extremely important as a means of minimizing and controlling the amount of polyunsaturated acids in soap used for synthetic rubber polymerization. Presence of these acids retard the rate and influence the course of polymerization due apparently to the chemical reactivity of the polyunsaturated acids which are thus capable of terminating the desired polymer-forming chain type of reaction.

This new method of measuring polyunsaturated acid contents is becoming increasingly vital in the development and control of commercial fatty acids for various industrial purposes. Without the method further progress would be drastically limited and improvements as well as new developments in fatty acids would depend entirely on practical and empirical evaluations rather than scientific knowledge of composition.

Many industrial applications of fatty acids depend on controlling the composition within fairly narrow limits. New cases of unique adaptability of specific compositions are being revealed almost monthly. With methods now available correlation of composition with practical performance is far more accurate than ever before. It is such correlations which point the way to specific commercial compositions for specific needs. The fatty acid industry enthusiastically welcomes the opportunity of applying these methods in order to develop those special fatty acids which will assist the users in making better finished products.

William G. Werner, a Director of BNF

William G. Werner, Manager of Public Relations and Director of Consumer Information, Procter and Gamble Co., Cincinnati, was elected to the Board of Directors of Brand Names Foundation, Inc., New York at the organization's annual business meeting held recently at the Waldorf Astoria.

Mr. Werner is chairman of the Publicity and Public Relations Committee of the Association of Soap and Glycerine Producers, and serves as Vice President of the American Fat Salvage Committee. He is also president of the U.S. Trade-Mark Association; a member of the Public Relations Advisory Committee of the Grocery Manufacturers of America; and a member of the National Cotton Council Advisory Committee.

Belgian Congo's Soap Production

Savco, a Lever affiliate, plans to complete revision of its plant in 1948 with the addition of machinery for the manufacture of European-type toilet soaps, and soap powders. Plans also include increasing present production of laundry soap and antiseptic soaps purchased especially by non-Europeans. Some factories enlarged their installations in 1947, while other soap plants were newly constructed.

During 1947, Belgian Congo soap exports totaled more than 10,000 metric tons. Most of these shipments were destined for Belgium.

DECORATIVE STOPPER (Patented) formed of tiny, colored sea shells delicately shaped into form of a flower.

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2 sixes available. This is our patented, ex-clusive leak-proof, airtight stopper-applica-tor. They can be had in assorted colors, also "metallized" with gold or silver finish.



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BOUQUET FLORAL STOPPERS (Patented)

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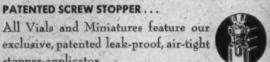
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Here are a few of what we consider to be the finest and most distinctive of America's miniature perfume bottles. Made entirely by hand by master glass blowers, they are available in many designs and in sizes from a few drops to 1 oz. Exclusive designs can be created and produced on special order. Write for catalogue today.











by ARNOLD KRUCKMAN



Arnold Kruckman

SCARCITIES expected to develop during the "next three or four months are said to be in steel, aluminum, copper, manpower, and alcohol.

MILITARY MANPOWER PROGRAM

The military manpower program is certain to be made law by early June. Whatever form it eventually assumes, it will take from 300,000 to 500,000 young men out of the nation's work-force. Apparently they will be between 18 and 26 years old. Veterans with a record of one year's service in the recent war will be exempt, as will those with responsibilities, or those who are essential.

The difficulty which confronts industry and business is the fact that work-force today has virtually absorbed all the male workers of the nation. There are few men available over and above the 60,000,000 plus now employed. The situation exists despite the fact that there are idle workers in some localities and areas. When and if laws are enacted which will place controls over the dispersal of the work-force, it is anticipated skilled and especially proficient workers may be shifted from less essential industries to those where their services are more urgently needed. This undoubtedly will mean that workers in some localities who are idle may take the place of their more skilled associates, and the skilled workers will be invited to move temporarily to places where their services are required.

Those whose business it is to study the problem, believe it will be necessary to call upon older men and younger boys, especially in the case of the latter during the vacation period, and that women who have retired to the homes will be asked to return temporarily to the work-force in the national interest. It is realized that most women who were employed during the war have married, or are responsible for the welfare of a home. It is expected that those who have come along during the intervening years will be eager to get into jobs to take up the slack created by these former workers.

SHORTAGE OF STEEL

The steel shortage naturally applies to tinplate, which spells containers and closures. Steel has never been in adequate supply, and there is no prospect of any increase. Obviously equipment and machinery will be increasingly affected. Aluminum will be more scarce because production facilities have been curtailed, and because hydro-electric power supply was sharply reduced in the Pacific Northwest by the rush of new industries to that region, and the great drought which cut dangerously into hydro-electric production. Copper is not as scarce as other raw materials, but is expected to diminish in supply as other metals become scarcer.

During the war we discovered scarcity of materials in short supply shifted the pressure upon those in easy supply, and, in turn, caused the stuff in normal inventory to become a scarce material. This is apt to happen in relation to glass and paper as the other materials are absorbed for more essential uses. Lead and zinc have never been abundant, and are not expected to be more

plentiful.

Alcohol is reported to be in a situation that spells scarcity. Representative Harris Ellsworth of Washington State has found upon investigation that the alcohol stockpile for war purposes would not last ten days. The other day the Office of International Trade came out with a warning that the supply of Cuban blackstrap molasses to distill alcohol has been drastically curtailed by the action of the Cuban Government.

The Cuban Sugar Stabilization Institute was ordered by its Government to set aside 40,000,000 gallons of blackstrap for manufacture of alcohol to be used only in Cuba to manufacture the fuel known as carburante. This

CAPS for Bottles and Jan

BOTTLE CAPS



100 Line-BOTTLE CAPS

In polished brass (lacquered), polished chrome, brushed bronze (satin finish), spiral brushed bronze and stenciled enamel. Can be embossed.

15 /425mm Short

15/415mm Tall

18 /400mm Short

18/410mm Medium

18 /415mm Tall

20/400mm Short

20/410mm Medium

20/415mm Tall

22 /400mm Short

22 /410mm Medium

22/415mm Tall

24 / 400mm Short

24 /410mm Medium

24 /41 Smm Tall

28 /400mm Short

28 /410mm Medium



200 Line-BOTTLE CAPS

In polished chrome, brushed chrome (satin finish) and enamel on chrome.

Sizes:

500 Line-"T" CAPS

In polished brass (lacquered),

polished chrome, brushed bronze

(satin finish), spiral brushed bronze and stenciled enamel. Can

20/410mm Medium 20/415mm Tall 22/400mm Short 22/410mm Medium 22/415mm Tall

be embossed.

15/425mm Shor 15/415mm Tall

18/400mm Short 18/410mm Medium 18/415mm Tall 20/400mm Short

Sizes:

22/410mm Medium 22/415mm Tall 24/400mm Short 24/410mm Medium



300 Line—Mushroom Caps

In polished brass (lacquered), polished chrome brushed bronze (satin finish), spiral brushed bronze and stenciled enamel.

20/410mm Medium 9320/410 (Enamelled)



600 Line—New Yorker Caps

In polished brass (lacquered), polished chrome, brushed bronze (satin finish), spiral brushed bronze and stenciled enamel. Can be embossed.



400 Line-BALL CAPS

In polished brass (lacquerel brushed brass or chrome phis

Outside diameter:

1 inch No. 001 15/415mm Tall 18/400mm Shor 18/410mm Med 18 / 400mm Short 114" No. 01 18/410mm Med 18/415mm Tall

11/4" 18 / 400mm Short No. 1 18/410mm Medi

18 / 415mm Tall 20 / 400mm Short 20 / 410mm Medi 20 / 415mm Tall

18/410mm Media 18/415mm Tall

135" No. 3

20 / 400mm Short 20 /410mm Mediu 20/415mm Tall 22 /400mm Short 22 /415mm Tall

24 / 400mm Short 24/410mm Medium



700 Line-Mandarin Caps

In polished brass (lacquered), polished chrome, brushed bronze (satin finish) and spiral brushed bronze.

20/410mm-Only



800 Line-TULIP CAPS

polished brass (lacquered), polished chrome, brushed bronze (satin finish) and spiral brushed bronze. Can be embossed.

Size:

20/410mm--Only



1000 Line—Biltmore Caps

In polished brass (lacquered), polished chrome, brushed bronze (satin finish), spiral brushed bronze and stenciled enamel. Can he embossed

Sizes:

20/410mm Medium 20/415mm Tall



1200 Line-ORCHID CAPS

In polished brass (lacquered), polished chrome, brushed bruse (satin finish) spiral brushed bronze and stenciled enamel. Can be embossed.

20/400mm Short 20/410mm Medium 20/415mm Tall

100 Line-FLAT CAPS



33/400mm with cork for Sachet Powder 33/400mm Threaded 35/400mm

48/400mm Threaded 51/400mm " 58/400mm "

JAR COVERS

In polished brass (lacquered), polished chrome, brushed bronze (satin finish), spiral brushed bronze and stenciled enamel. Can be embossed.

63/400mm Threaded

70 / 400mm 89 / 400mm



900 Line-DOMED CENTER CAPS



 Sizes:

 933 /400mm with cork for Sachet Powder
 948 /400mm Threaded

 933 /400mm Threaded
 951 /400mm "

 935 /400mm "
 958 /400mm "

963 / 400mm Threaded

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blended motor fuel is composed of 65 per cent alcohol and 35 per cent gasoline. The mixture of gasoline is required at the rate of 3 gallons of gasoline to 1 gallon of carburante in a motor vehicle tank. Gasoline is critically short in Cuba. The mixture indicated is mandatory as the result of emergency regulations. To make matters more serious, all stocks of alcohol in Cuba have been frozen and 1,367,000 gallons have been allocated to the production of carburante. The Cuban Government has pegged the price of anhydrous alcohol at 37.13¢ per galon, and 95 per cent alcohol must be sold for 35.275¢ per gallon. Under present circumstances the Cuban sugar industry receives 16¢ less per gallon for alcohol than is normal. Representative Ellsworth, early in April, esimated it costs 24¢ to 28¢ to bring a gallon of Cuban ethyl alcohol into the United States.

Meanwhile in March the War Assets Administration announced it would sell to the highest bidder the experimental plant at Springfield, Oregon, where they can produce 4,000,000 gallons of industrial alcohol per year, making the product from sawmill waste by what is known as the continuous percolation process. It is assumed, however, that the plant cannot be sold since the President issued the Executive Order freezing all Government-built plants in the hands of War Assets. There is little likelihood the plant will be sold. The Department of Agriculture has vigorously protested the sale of any alcohol-production facility in the light of the prospective scarcity. Incidentally, since alcohol suggests sugar, it is interesting to note we have imported 102,296,014 pounds of sugar from the Philippines since January 1.

FATS AND OILS

LL CAPS

(lacquer

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Sizes:

415mm Tall 400mm She

410mm Ma

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415mm Tall 400mm Short

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15mm Tall OOmm Short

10mm Medi

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10mm Medi 15mm Tall

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10mm Mediu

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APS

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e Co.

There is also reason to be cautious about fats and oils. The supply is not as abundant as it should be, and it shows no sign of increasing. From the Philippines, since January, we have brought 25,176,780 pounds of coconut oil. Another aspect of the possible control-cramped economy to bear in mind is transportation. It is certain that with expanding cargoes the Government will be forced to exercise controls over freight car space, possibly something as simple as the controls exercised during the recent period of coal shortage. Priorities were given to those materials and commodities which had an effect upon the national health and welfare. Naturally under the conditions of a near-war economy the implication of the work welfare will be greatly expanded. Likewise the scarcity of freight-cars will have a decided influence in making embargoes necessary.

Preparation of industry for all this is being conducted mainly by three agencies—two civilian, one military. The Office of Industry Cooperation, in the Department of Commerce, headed by John C. Virden, works with more detailed, specific, and smaller bits and pieces of the national economy. It was brought into being by the Taft Anti-Inflation Law, the legal omnibus for many things. Virden and his men were supposed to make voluntary rationing work, but neither they nor industry had much heart for it, so nothing along that line has happened. Perhaps the President and Virden had a sort of tacit understanding that it wouldn't hurt anyone's feelings it it didn't happen, because they were rather set on having mandatory controls. In making ready for whatever is a head, Virden and his subordinates divide the economy

into its general classifications, such as iron, steel, textiles, chemicals, etc. A specialist is placed in charge of each unit. He then calls together for a conference separately the many industries embraced by the basic materials.

For instance, some time in the near future the man in charge of chemicals will call together representatives from the essential oils industry, and will ask them to form an Essential Oils Industry Advisory Committee. The same thing will happen in relation to other parts of the perfumery, cosmetics, and toiletries industry. When they are organized they will be asked to help in making a survey of the resources of the industry with the obvious purpose of having on hand every bit of data that may be useful in planning for whatever may be ahead.

The other civilian industry unit is not as completely civilian because it is part of the National Defense setup at the Pentagon. It is headed by Alfred Hill of Greyhound Bus Lines and is known as the National Security Resources Board; you will hear more and oftener about it in the not remote future as the NSRB. This Board is expected to be the WPB and the OPA, and, probably, the OCD and ODT of the last war. The plan is for one agency, virtually a part of the armed services, to be the over-all top for all these functions. It will regulate controls, fix prices, form liaison with the armed services, regulate transportation, and so forth. Meanwhile it also is organized with 20 or 25 divisions, each headed by an expert, and each devoted to a primary part of the national economy. It differs from OIC-Virden's groupin that it functions solely upon basic elements of the economy. For instance, when it calls together the Brass from the chemicals industry it will deal with the Duponts and similar representatives of the uttermost top flight of the ultimate Brass. It represents, as it were, the very foundations of our national economy, and with the aid of these folk who make the fundamentals tick, it will make the basic policies for whatever must be done.

MUNITIONS BOARD

The Munitions Board, also in the Pentagon, the military unit, would like to have the authority to make WPB, OPA, etc. regulations, but there seems doubt about the advisability of the idea. At present apparently it seems to be the conduit through which flows that stream from industry which gets "educational orders," "research orders," and orders under less camouflaged appellations which are designed to produce those things we need to get ready for all eventualities. Unquestionably, when the \$5,000,000,000 or \$6,000,000,000 additional are provided by Congress to give the 17 European nations military lend-lease help, the Munitions Board will be the channel through which the business will flow, or which will direct the flow of the business. At present it is undoubtedly preparing to give momentum to the business which must be out agoing when Congress supplies the \$4,000,-000,000 for our own incipient military preparation.

Beginning April 20 all commercial shipment to Algiers, Tunisia, and French Morocco were subject to the R Group of OIT, and, if over \$140 in value, required a validated export license. Other countries on the R list are continental Europe, United Kingdom, Eire, Turkey, all Asiatic Possessions of Turkey, the U.S.S.R., the Azores, Madeira, Spanish Colonial possessions, Tangier, the Mediterranean Islands, and French North Africa.

New products and processes

Filling Machine

The Karl Kiefer Machine Co. has improved its Vari-Visco Filling Machine. Illustrated here is the new equipment in the Cadet Model. The container capacity ranges up to 32 ounces, liquid measure, and speeds running to a maximum of 60 per minute. Notable among its features are said to be the ease of adjustment for product volume and rate of delivery. Such regulation is accomplished with precision by turning hand-wheels on the front panel.

For higher speed and greater container range, heavy-duty Vari-Visco Filling Machines are available in conveyor and tray type models.

Insecticide Emulsifier

Extremely stable water emulsions of Toxaphene can be made with EMCOL H-30 emulsifier developed by Emulsol Corp., Chicago, Ill.

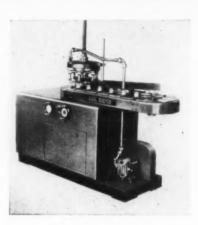
Magnetized Conveyor

Material Movement Industries, Inc., announces that its lightweight Tote-All Bulk Material Conveyors are available with an adjustable chute that removes all stray iron from the bulk materials being conveyed. The chute, which may be attached or detached as desired, has a powerful, permanent magnet built in.

Case Sealing Glue

Paisley Products, Inc., has introduced Boxseal Glue, an adhesive designed especially for automatic case sealing machines. Although Boxseal is an automatic machine sealing adhesive, it may be applied by hand brushing. The makers point out that Boxseal remains in a fluid condition indefinitely, permitting it to be piped directly to the machine glue pans without danger that the adhesive will solidify in the pipes and cause stoppages.

Boxseal, which is described as a liquid converted starch derived adhesive, is reported to be an extremely fast-setting adhesive.



Vari-Visco filling machine

Heavy-Duty Mixer

Do-All Mixer and Blender, a new heavy-duty mixer, has been introduced by D. B. Lewis Co. The outstanding feature of the new mixer is a leak-proof gland which is said to be wasteless and smooth operating. The machine is equipped with self-aligning ball bearings and requires a minimum of horsepower, is easy to clean and quick to unload. It is manufactured in sizes from 100 to 5,000 pounds in mild steel or stainless steel.

Vinyl Resin Coating

Production of a new economical vinyl resin coating combining flame-resisting qualities with exceptional abrasion and weathering characteristics has been announced by the Monsanto Chemical Co. The new product is called Ultrasol.

Protective Coating

Called Permacote, a new versatile protective coating has been developed by the State Chemical Corp., for use on surfaces requiring protection from moisture, acids, alkalis, alcohol, etc. It can be applied by brush, spray or dip and forms a tough transparent coating. The coating is said to effectively seal in and prolong the life of ordinary paints, lacquers and varnishes. It is available in one and five gallon cans as well as in 50 gallon drums.

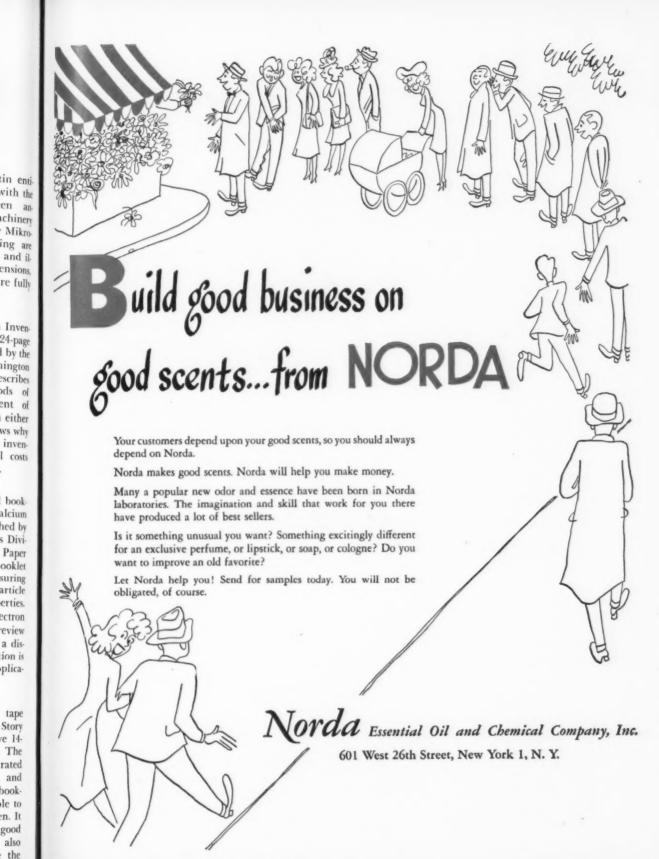
New Catalogs

A new illustrated bulletin entitled "Optimum Recovery with the Mikro-Collector" has been announced by Pulverizing Machiner Co. The features of the new Mikro-Collector for dust collecting are described in detail in text and illustration. Filter rates, dimensions, weights, and other details are fully covered in the bulletin.

"How to Get Profits from Inventories" is the title of a new 24-page illustrated booklet published by the Systems Division of Remington Rand, Inc. It pictures and describes the most modern methods of simplifying the management of stocks to prevent losses from either too much or too little. It shows why and how improved, modern inventory records reduce clerical costs and conserve executive time.

A 48-page, fully-illustrated booklet, entitled "Precipitated Calcium Carbonates" has been published by the Industrial Chemical Sales Division, West Virginia Pulp and Paper Co. Among other data, the booklet gives in detail methods of measuring whiteness, test procedures, particle size data, and chemical properties. Graphs, tables, charts and electron micrographs are included. A review of the salient properties and a discussion of the field of application is covered in a chapter on applications.

How a different gummed tape was developed is told by "The Story of GP Adhesive," an attractive 14-page booklet, issued by The Gummed Products Co. Illustrated with photographs, drawings, and diagrams, the material in the booklet should prove to be valuable to both laymen and technical men. It tells some of the principles of good gummed tape adhesive, and also describes tests used to prove the worth of GP Adhesives.



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& Essential Oil Review

ımer

May, 1948 459







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A compendium of significant news and views

Harold Hutchins says ...

ONE MAN'S OPINION

Those two Army sergeants, capable of lifting a bomber from the ground and flying it for 1700 miles over water and the Andes Mountains, should be promoted to the rank of Captain. Then, they should be trained to fly those same ships. Punishing these men is bad business all around. It is bad for the Army. It is bad for Army enlistments. It is bad for all Americans. And maybe the fool idea will filter along that flying does not require all of those years of training. Further, someone will collect similar stories. They come along infrequently, but they come. Grease monkeys on flying fields take to the air unwittingly, yet bringing the ship to ground without mishap. And where is the sense of humor of our officials responsible for bringing these men to court martial in the first place? Are we for stopping all initiative? Was not the Army supposed to encourage individuality? So, please, Higher Authority, reverse the judgement of the court.

ADVICE TO EDITORS

Some few editors, or the office boys in their establishments, have the miserable habit of rubber-stamping contributions from authors with the name of the publication to which the story or article was submitted. Then, the poor writer has to retype the stuff when it is returned, before he can submit it to another potential purchaser. Not that editors are biased because the material is sent to them second or third in order, but because the author feels that a new reader deserves an opportunity to judge on own impression, rather than with two strikes stamped on the manuscript by Editor so and so and so. A contribution is the property of the submitter and should not be maltreated by an editor, until his publisher has decided to buy. That, at least, would be a nice way to consider it.

WANNA BET?

If that traffic court hocus-pocus does nothing else but publicize the terrible conditions and the farce of justice for traffic violations, it will be worth while. The only thing wrong about the system is that the traffic officer responsible for giving the ticket, in the first place, is prosecutor, witness, judge and jury. In that BIG city that I know so well, the poor motorist hasn't a chance. And the fines collected may be just so much more license fees.

FOOD FOR THOUGHT

Have you ever thought how the population has shifted over the years? Not so long ago, more people lived in the rural areas than in the towns and cities. But, now, the shift brings 53 per cent to urban areas, leaving only 47 per cent to till the soil, husband the animals and produce food, not only for the whole country, but for export, as well.

A FREE RIDE

Are you interested in experimental plastic containers or advertising thing-a-mejabs? If so, two youngsters, with the know-how, have started a business of their own. They are willing and able to play your way or throw in an idea of their own. So, don't be bashful in asking for their names. But, what are we doing in giving all this free space? Ah, yes, maybe we can help those youngsters, today, and when they grow up, tomorrow, they will be advertisers in The American Perfumer. Who knows?

A COINCIDENCE?

We just recalled our recent item. on these pages, concerning the lack of soap and towels in the school toilets of that BIG city on the Hudson. The note just nosed out any other public notice of this. But, either we are lucky in timing the whole business, or that item of ours set in motion the present militant mood of the parent groups. For, now, what do they wish? The City earmarks \$500,000 for its Golden Jubilee Celebration and the parents wish the City Fathers to assign that half-million to buy soap and towels. Whee, are we responsible for that?

BUYING POWER DOUBLED

The average weekly earnings of factory employees have risen from \$11 in 1913 to over \$51 in 1948. In terms of buying power, the average factory worker can buy twice as much as he could in 1935.

PET PEEVES

We went visiting a friend in the hospital, and if the minor irritations are representative, then the patients must find them looming large. At this particular hospital, an elevator passed the floor where a patient was waiting to be lifted to the operating room floor. On the way down, the elevator passed once more-this time with garbage. The patient should have had priority. The hall was no place for the patient to be waiting. Either the elevator should have been halted and the passengers and garbage bounced, with the patient being taken immediately to the operating room, or the patient shouldn't have been brought from his room until the elevator was at the landing and waiting. So, how about this, you hospital people who read these pages of wisdom?



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WILL PERSONALLY HELP YOU UTILIZE THESE THREE SOURCES OF OUTSTANDING RAW MATERIAL AND ENABLE YOU TO DEVELOP MODERN PERFUMES OF BEST QUALITY AND HIGHEST SALES APPEAL.

ALDECUIR

MORE ABOUT HOSPITALS

And while we waited for the patient to return from the operating room, we noticed many other disquieting things. This was a private floor of a large hospital, in a big city, mind you. Well, we wondered how the patient, seeking sleep, at early dawn, would appreciate the knocking on the door by the travelling barber? Or suppose the patient was waiting for the knock, telling him or her of the arrival of the operating room attendants, and it turned out to be the barber? After all, he knocked on every door, without reading the Mr. or Mrs. or Miss on the door. So, suppose he did have a concession at the hospital, why couldn't a little card be hung out by a nurse, to tell the barber who wanted service and at what time? Just a helpful little hint. And here is one more. The newspaper vendor also had free reign in travelling this 'private" hall and knocking on door after door. Free enterprise is exactly what we are for but, by gosh, we are for it all around. Even to the extent of giving a little to the helpless patient, in his or her fight to regain health. So, why not curb those barbers and newspaper vendors in hospitals? And a final remark on the ineptitudes of hospital management concerns the noises without. It seems that the hospital planners see a nice park and usually build right across the street from it, without ever thinking about the traffic noises. One gorgeous hospital, I frequently visit, has the world's greatest river traffic noises. It's bad enough when a fellow is well, but it's tough to watch a sick patient wince every-time an auto horn blows or a riverboat whistle screams.

THERE'LL COME A DAY!

Non-medical writers prepare and publish copy in magazines of national and international circulation that runs into the millions. The subjects vary from their own experiences, as a patient, to the most controversial subjects in medicine. The readers may be influenced by the prestige of the publication and by the name of the author. The advice given may be excellent or it may be harmful. The writer and the editor face their consciences. But, medical men, particularly those in governmental posts, find it convenient or irresistible to write laudatory letters, at least these are the only ones published, to the editor on the work of the lay writer. These same medical men would be for-bidden by their local "Ethical Committee" or their "Grievance Committee" of the Medical Society from voicing their experiences in journals intended for non-medical readers. Perhaps some day, soon, doctors and editors will manage to reach the medical-fact-hungry public without the intermediaries.

IT'S YOUR BUSINESS

America's growth and prosperity have been largely due to the fact that the nation has encouraged risktaking and rewarded it well. And that is the only way it can continue to grow. If every business were safe and its prospects assured, no special incentive would have to be offered for its development. It is the existence of the risk that makes necessary the incentive of profit. It is the incentive of profit that attracts the developers. Risks are just as numerous today, but there is a new factor to contend with-a factor that will prevent the enterprise system from operating as it has in the past and will stifle progress, unless something is done soon. Tax rates have been stepped up to where they threaten to smother risk-enterprise. The result is that the risk-taker has little incentive to invest in a new venture. If he does succeed, the government will collect most of his reward, but if he doesn't succeed, he absorbs the entire loss. Even more serious, he no longer has enough savings after taxes to use for risk or venture capital. The effect of confiscatory taxes taking up to 82 per cent of individual income is to soak up savings to such an extent that they are not sufficient to finance necessary new investment. This problem of maintaining an adequate flow of venture capital is of special concern to all business and to Congress.

EUROPEAN SURVEY

Nate Shapero, National Chairman of the Drug & Cosmetic Division of the \$250,000,000 minimum United Jewish Appeal for refugees, overseas needs and Palestine, sailed last month for a six-week trip to Europe, during which he will survey conditions in Jewish displaced persons camps in Germany and observe the European operations of the Joint Distribution Committee, a constituent agency of the UJA. On his return, Mr. Shapero is scheduled to tour major cities to bring a firsthand report of the situation of European Jews to drug and cosmetic leaders, as part of his vigorous efforts to mobilize the industry for a record-breaking role in the UJA's. 1948 "Year of Destiny" Campaign.

NEW VITAMIN

A new vitamin, B₁₂, which combats pernicious anemia, has been isolated by five research workers of Merck & Co., Inc., manufacturing chemists, which achievement ended six years of research on the project. In discovering the new vitamin, the Merck scientists succeeded in isolating from liver a red crystalline principle which has given evidence of being a factor in liver responsible for the successful treatment of pernicious anemia, it is reported.

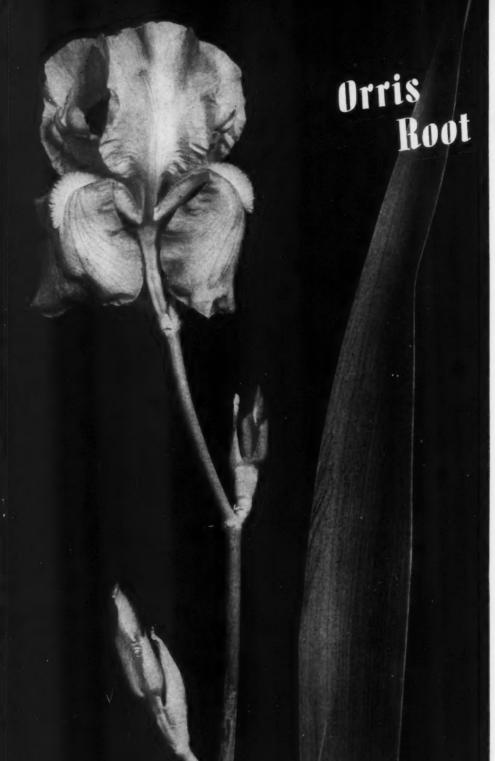
LESS NOISE-MORE WORK

To ease employees' tension, many companies are sound-conditioning their plants. Research workers have found that noise increases nervous strain and the number of mistakes in factories. Because noise cuts down efficiency and reduces output, sound conditioning got a good start in wartime.

'47 RESEARCH COSTLY

Independent industrial research, to create more and better products at lower prices, usually considered an undertaking of large corporations only, plays so important a part throughout industry generally that about one-half of the products of smaller concerns were developed from their own research, it is shown in reports from 983 manufacturers whose research programs were surveyed by the National Association of Manufacturers. The survey showed that manufacturers replying estimated their 1947 research expenditures at \$207,384,188-almost \$26 million more than in 1946. Of the firms which said they carry on research, 74 per cent maintain re-search laboratories. As to smaller companies, the survey showed that 48 per cent of those having research programs, and which reported gross sales of \$250,000 or less, have their own laboratories, while 55 per cent with sales between \$250,000 and \$1,000,000 maintain their own research facilities. Questions answered by 406 firms revealed that 72,517 patents resulted from these companies' own research facilities. Companies with sales under \$500,000 yearly have 423 such patents, and firms with sales of \$30,000,000 or more reported 54,379 patents based on independent research. Sixty per cent of 557 concerns having their own facilities reported that they relied solely upon them. Others use private research laboratories, institutional laboratories or research foundations, university fellowships, facilities of trade associations, and governmental laboratories.

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SMALL BUSINESS GROWING

There's a frightful amount of "bunk" in the talk about "Big Business." The Department of Commerce notes that it is small business which is dominating the picture of post-war growth. More than 95 per cent of the 1,200,000 firms launched since V-J Day have been concerns with less than eight employees. And only two-tenths of 1 per cent had more than 50 employees. The most recent census of manufacturers showed that 64.8 per cent of the wage earners in manufacturing were employed by employers of fewer than 500 workers each. Does that sound like "concentration of power by business"?

A WORTHY CAUSE

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Extracts

On May 5, Madame Helena Rubinstein opened her magnificent triplex penthouse and terrace gardens on Park Avenue to the City Garden Club's Annual Showing of New York gardens and penthouse terraces. Tickets for the afternoon's showing were \$2.50, of which part went to the support of children's gardens in the congested East Side and on Welfare Island. Madame Rubinstein also exhibited her art treasures at the same time.

SUIT DISMISSED

Federal Judge Fake, at Newark, N.J., recently dismissed the action against the Bender Corp., manufacturers of private label toiletries in bulk, for \$300,000, started by the O.P.A. in September 1945, on motion of U.S. Attorney Rossbach. The Bender Corp. challenged the right of the O.P.A. to retroactively change prices which it had previously approved, for Bender Corp. products, ranging from about \$3.00 a gallon to \$82.00 per gallon of toiletries, without giving notice and an opportunity for hearing.

PROPRIETARY MEETING

Dr. F. J. Cullen, executive vice president of the Proprietary Association of America has announced the principal speakers who will address the 66th Annual Convention to be held in Atlantic City, May 24 through May 26. The keynote of the meeting this year will be adopted from the Association's Mid-year Scientific Section Meeting held last December, "Better Medicines for Better Health Through Research." Backing up this goal set by the Association, its members, who produced 80 per cent of the packaged medicines manufactured in the United States, invested some \$14,-

000,000 in 1947 for medical and drug research and scientific control programs. Apropos of this, speakers include such celebrities as Harvey B. Haag, M.D., Dean of the Medical College of Virginia; Howard W. Haggard, M.D., Director, Laboratory of Applied Physiology, Yale University; Dr. Austin Smith, Director, Division of Therapy and Research, and Secretary of the Council of Pharmacy and Chemistry of the American Medical Association; George P. Larrick, Assistant Commissioner of The Food and Drug Administration, and a prominent Congressman. About 500 attendees took part in the business and round of entertainment sessions, held in conjunction with the convention.

DIVISION MOVES

Headquarters of the Sterling Products Division of Sterling Drug, Inc. have been transferred from Wheeling, W. Va., to Monticello, Ill., reports Stanley I. Clark, vice president.

A NEW WORD

Packaging experts of the Du Pont Co.'s Cellophane Division, who formerly termed unplanned buying as "impulse purchases," have coined the word "spurchases" to designate spur-of-the-moment buying decisions. Continuing surveys show that 38.2 per cent, or about two of every five purchases in supermarkets, are in the extra, unplanned category. In the service-type stores, where there is less open display and variety, the survey just completed shows that 29.9 per cent, or about one in three purchases represent unplanned buying. Of the 100 billion food purchases last year, costing 28 billion dollars, the percentage of "spur-chases" takes on added importance.

CHEMICAL RESOURCES

Representatives of 120 American and Canadian chemical companies met in Boston last month for a joint session on chemical market research, sponsored by the Chemical Market Research Association and Massachusetts Institute of Technology. Organized for the development of economical uses of America's chemical resources, the association for the first time in its history held a joint session with a university. The association cooperates with various government agencies in clarifying the types of information which are most helpful in appraising trends in the chemical and related industries, both with respect to existing products and new products.

GREATER N.Y. FUND

The Greater New York Fund will seek \$8,000,000 in its 1948 campaign, which will continue through to June 11, with the month of May serving as the "Greater New York Fund Month." The Fund solicits corporations, partnerships and employee groups throughout the city in behalf of 423 local hospitals, health and welfare agencies—Catholic, Jewish, Protestant and Non-Sectarian.

"NEW LOOK" GARB

An exhibition of Rexall drug products in their "New Look" garb—probably the largest package redesign program in the drug industry—has been opened in the conference room of Koodin-Lapow Associates, 250 West 57th St., New York. The exhibition will be open daily except Saturday from 2 to 4 p.m., with showings at other times by special arrangement. In all, fourteen of Rexall's lines were redesigned by this organization.

DEDICATE PARIS SALON

Leaders in all branches of the cosmetic industry were guests at a luncheon tendered last month in the Embassy Room of the Hotel Ambassador, New York City, to participate in the proceedings attending the opening of Harriet Hubbard Ayer's Paris Salon, 89 Rue de Faubourg Saint Honoré. A two-way telephonic broadcast was set up, enabling Ralph Lewis, president of Harriet Hubbard Ayer, and Charles Luckman, president of Lever Brothers, which owns Ayer, to speak greetings to the assemblage in the Paris Salon, and to enable those at the luncheon in New York to hear the speakers at the Paris dedication.

SEES RECESSION

Two out of every three of 185 leading companies in the \$6,500,-000,000-a-year packaging and packing industries foresee a mild business recession beginning next fall or early 1949 and lasting from six months to a year, according to a poll taken among producers of packaging machinery, equipment, materials, design and services by the American Management Association. The poll was taken for the information of more than 15,000 representatives of approximately 5,000 packaging and packing producers and users in the U.S. and nineteen foreign countries who gathered last month at the AMA's 17th Annual Packaging Exposition and Conference in Cleveland.

MARKETING DRUGS AND COSMETICS

By Louis Bader, Ph.D., Associate Professor of Marketing, New York University, and Sidney Picker, M.C.S., President, Namerc, Inc., and Natalie Louise, Inc., New York, N. Y.

If you have a cosmetic or drug product to market you will want this valuable, complete handbook!

The material in this handbook will help solve the many merchandising problems of cosmetic-drug manufacturers, wholesalers and retailers.

It first appeared exclusively in *The American Per*fumer, in recent monthly installments, and has just been published in book form for your convenient reference use.

This book describes the basic fundamentals of every operation in the cosmetic and drug field.

It explains how to best introduce new products, how to get the most out of advertising, how to arrange displays that sell by themselves, and how to apply hundreds of other means of moving merchandise profitably.

Here are painstaking directions for packaging prod-

ucts, explaining the importance of size, shape, style, color, design and materials.

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These chapter headings give you an idea of the valuable contents:

The Market
The Product to be Produced and
Marketed

Competition and Merchandising Practices

The Development of Drug Store Marketing Packaging the Product

Dealer Types and the Problems of Selling to them Trade Practices

Organization of Marketing Division

Developing Marketing Plans

Introductory and Combination
Sales to Dealer and Consumer

Necessity for Marketing Re
Government Regulation
Numerous tables and charts

Methods of Obtaining Dealer Cooperation

Miscellaneous Sales Promotional Efforts

Consumer Combination and Premium Offers
Advertising Drug Store Products

Types of Displays Merchandising the Ethical Prod-

Price Legislation
The Problem of Financing

The Export Market
Necessity for Marketing Research
Government Regulation

The American Perfumer

MODERNIZATION CLINIC

A five-day conference on problems of store modernization, to coincide with the International Store Modernization Show at Grand Central Palace, New York, July 6-10, inclusive, has been announced by Dr. Charles M. Edwards, dean of the Graduate School of Retailing, New York University, and chairman of the advisory and planning com-mittee of the show. The conference, which is unique in this field, will be comprised of 10 clinics on five basic problems of modernization, including "Layout and Traffic," "Lighting and Color," "Displays and Fix-tures," "Store Fronts" and "Planning and Budgeting for Modernization. Invitations to the show may be obtained form John W. H. Evans, managing director of the show, 40 East 49th St., New York 17, N.Y.

EARNINGS JUMP

Heyden Chemical Corp. recently reported net earnings for 1947 totalling \$2,715,908 or \$2.01 per share, as compared with 1946 earnings of \$2,416,523 or \$1.80 per share. During the year, B. R. Armour, president of the corporation, reported that net current assets increased from \$5,046,000 to \$9,197,000.

HOLD SALES MEET

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A week-long sales conference, involving all personnel of the recently consolidated Special Markets and Industrial Divisions of Winthrop-Stearns, Inc., to coordinate national distribution policy, was held last month at the Westchester Country Club. Almost twenty different products are sold through the new Division, which plans an extensive sales and trade paper campaign.

CHANGES NAME

Stockholders of the Mathieson Alkali Works at the annual meeting, recently held at Saltville, Va., approved a change in the company's name to Mathieson Chemical Corp.; authorized the issue of 500,000 additional shares of common stock; approved the retirement of all but the present outstanding shares of preferred stock, and elected directors for the fiscal year.

WESTERN PACKAGING SHOW

Western industry and business leaders, increasingly concerned with problems and developments in packaging, packing and shipping, are voicing strong interest and approval in the forthcoming First Western Packaging Exposition and the concurrent First Western Conference of

Packaging, Packing and Shipping. The four-day conclave will be held in the San Francisco Civic Auditorium, August 10-13, inclusive. Over 100 concerns have already contracted to exhibit and demonstrate their products and services. Leaders in the industry will address the educational sessions held in conjunction with the meeting. Kenneth K. Dean, 759 Monadnock Bldg., San Francisco 5, Cal., is general chairman of the Exposition.

NEW PRODUCTS

The Pennsylvania Salt Manufacturing Co. announces the production of several new fluorine products, including sulfur hexafluoride, several metal polyfluorides and, in small quantities, certain organic fluorides. The company also announced completion of experimental work on chlorine trifluoride, which it is now making in small amounts.

PURELY PERSONAL

DR. CHRISTIAN H. AALL has been named to the new Monsanto Chemical Co. post of field research technologist, at Monsanto, Tenn.

DR. THEODORE G. KLUMPP, president of Winthrop-Stearns, Inc., was recently elected president of the American Pharmaceutical Manufacturers Association, at its annual convention, held this year in Havana, Cuba.

RANDOLPH P. LEUBE, former vice president and general manager of Mark Cross Toiletries Division, and prior to that vice president and general manager of Schiaparelli, and before that general sales manager of Bourjois and Barbara Gould, has been named as eastern division manager of Chen Yu, according to a recent announcement by Morris L. Levinson, president of Chen Yu. Mr. Leube will make his headquarters at Chen Yu Inc., 610 Fifth Ave.

TANGEE will break its new shade—"Pink Queen"—in the May 31st issue of *Life*.

W. LANE WITT, president, National Industrial Advertisers Association, has announced his resignation to become president of Sales-Aids, the cooperative market research organization for industrial marketers. Sales-Aids, located at 410 South Michigan Ave., Chicago, Ill., is the new, cooperative fact-finding service to assist sales and advertising managers marketing industrial products.

DR. IVOR GRIFFITH was last month re-elected president of the Philadelphia College of Pharmacy & Science, in which capacity he has served since 1941. At the same meeting, two new trustees were elected —Dr. Charles E. Vanderkleed and Ray C. Held.

BENSON STORFER, president of Parfums Corday, and Helen Allen, vice president, have returned from a trip to France, where they surveyed the raw materials market and inspected areas in which their products are distributed.

LAURETTE BERTIN of Revlon becomes Mrs. Sidney Weisman.

HARRY JOHNSON has been promoted by Kathleen Mary Quinlan to vice president in charge of sales. He plans to leave soon for a visit across the country to the West Coast

KAY McKENNA is the new toilet goods buyer at Oppenheim-Collins in Philadelphia.

ROBERT MARSCHALK has succeeded Hugh McKay as president of Seaforth. McKay becomes chairman of the board.

AL LANNING, formerly with Endocreme, has been named Eastern Manager of De Kama.

ROBERT I. RHEINSTROM of Hirestra Laboratories has returned from a vacation-cruise.

A. L. VAN AMERINGEN was the first of six guest speakers on Samuel Klein's Aromatic Course at New York University.

ERIC L. H. COSBY gave a party at the Colony Club in New York last month to introduce the new Kent-Cosby "Allure" Perfume Hair Brush, which perfumes the hair as it brushes it,

MIRIAM GIBSON FRENCH, formerly of *Charm* Magazine, has opened her own public relations office in New York, specializing in fashion and cosmetic accounts.

FRANK GILLISE, formerly sales manager of Parker Herbex, becomes general manager and director of sales for Skin-Tested Drug Co., who are currently introducing Cyl-Dent dentifrice.

EMPIRE STATE COSMETIC SHOW will be held at the Hotel Syracuse, Syracuse, N.Y., September 7-10.

JOHN FENLON, formerly with Chen Yu and now in charge of Molyneaux offices in New York, has selected Cole & Chason as their advertising agent.

BRIDGEPORT

Metal Cosmetic Containers Caps and Closures

Perfume and cosmetic manufacturers for more than a quarter of a century have recognized the precision craftsmanship of Bridgeport Metal Cosmetic Containers.

The consistent uniformity and beauty of our products has resulted in many leading manufacturers remaining as consistent users of Bridgeport Metal Containers.

When you are again planning a product that requires an original design be sure to examine the fine precision and decorative beauty of Bridgeport Products.

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Powder Boxes

Perfume Vial Cases and Caps

Lip Brushes

Drawn Talc Containers

Miscellaneous Make-up Cases and Other

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THE BRIDGEPORT METAL GOODS MFG. CO.

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THE ROUND TABLE -

Schoninger Impressed with Improved Spirit Abroad

Frederick E. Schoninger, president of Antoine Chiris Co., Inc., New York, N.Y., has recently returned from a two month visit to the French Chiris company's plants in the South of France and Italy. He was very much impressed with the improved spirit prevailing in both countries. Production has increased considerably and for the first time since the liberation of these countries there seems to be a spirit of hope and confidence.

Mr. Schoninger spent several weeks with the Chiris company in London and found that the same dogged determination to win through that he witnessed during the Battle of Britain exists today.

Leon A. Chiris, who is the chairman of the various Chiris companies throughout the world, is at present located in Grasse where he is directing the French company's activities as its chairman and general manager.

Mr. Schoninger has been appointed a director on the Board of the Chiris French company and of its affiliated companies in Italy, but will continue to spend the greater part of his time in America in charge of Chiris, New York.

P. Robertet & Cie. Organizes U.S. Company to Handle Sales

P. Robertet & Cie., Grasse, France which has been represented by various agents in the United States for many years has organized P. Robertet, Inc. with offices at 125 East 23rd St., New York, N.Y., to handle its growing business in the United States and Canada.

P. Robertet & Cie. was established in Grasse in 1850 and for many years was under the direction of the late Jean B. Maubert who died in 1933 at the age of 83. Since he was 18 years old until his death Mr. Maubert was associated with

the company and contributed much to the development of the essential oil industry. His son, Maurice Maubert, the present head of the company, has carried on and amplified the work of his distinguished father. Under his guidance the company has grown from a local concern into a world wide enterprise with representation in all of the leading countries. It maintains a modern, well-equipped factory with the principal offices in Grasse and Paris.





Jean Maubert

Shaw Mudge

The company produces absolute floral oils, resinoines, essential oils and other perfume raw materials for the perfume, soaps and allied industries. The American company will be under the direction of Jean Maubert, son of Maurice Maubert, and Shaw Mudge, son of Arthur Mudge who is well known throughout the essential oil industry. Stocks of Robertet products are to be carried in New York to insure prompt deliveries to the American trade.

Louis Rapin Visits Old Friends in the United States

Louis Rapin; now living in France, has been visiting New York for a few weeks. As head of Antoine Chiris Co. Inc. for many years before his retirement a year ago, he made many firm friends in this market throughout the industry, all of whom have been giving him a warm welcome. It is hoped he continues to "vacation" with us at intervals.

ASECP Elects Officers

At a recent meeting of the American Society of European Chemists and Pharmacists, held at the Master Institute, New York, N.Y., the following officers were re-elected: Herman Mark, president; Fritz Lieben, vice-president; Henry Goldschmiedt, executive vice-president; Benno Baecker, honorary secretary; and Marco Birnholz, treasurer.

Heyden Receives Safety Award

As of the end of March, 1948, employees of the Fords, N.J., plant of the Heyden Chemical Corp., New York, N.Y., had worked 316 days, or more than 440,000 man-hours, without a lost-time accident. It resulted in the plant receiving a Merit Award in the 20th statewide Interplant Safety Contest sponsored by the New Jersey Department of Labor and the New Jersey Industrial Safety Committee.

CIBS Association Holds Luncheon Meeting

Cosmetic Industry Buyers & Suppliers Association, a relatively new organization, with a membership growth of close to a hundred within a few months, held a luncheon meeting May 13 at the Little Venice Restaurant. The organization is headed by Arthur Mulligan, Lehn & Fink. Other officers include vicepresident, Paul Alexander of Drug & Cosmetic Industry; secretary, H. Conklin of the Werner G. Smith Co., treasurer, Henry A. Budd of Ungerer & Co. The entertainment committee whose chairman is Chester Hall of W. J. Bush & Co., is planning a smoker for some evening in May and a golf tournament, the latter to be held June 16th at the Montclair Golf Club.

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PERFUMERS

BASIC MATERIALS



OPOPOLYL B. A.

Opopolyl B.A. is based on a new and modern ingredient. It is truly an utility product for it has several outstanding uses, chiefly among which is its ability to round out, sweeten, and make the perfume more lasting.

If you are contemplating the production of a new line or improving one of your stable numbers we will gladly send sample of Opopolyl B.A. and make suggestions for its use.



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NEW YORK 7, N. Y.

DCAT Spring Luncheon

The Drug, Chemical and Allied Trades Section of the New York Board of Trade has announced its Spring Luncheon Meeting for June 24, at the Hotel Astor.

Clifford Baker Becomes Chesebrough Director

Clifford M. Baker, past president of the Toilet Goods Association, has become a member of the Board of Directors of the Chesebrough Manufacturing Co., New York, N.Y. Mr. Baker is also chairman of the board of Pond's Extract Co., and a vice-president of Lamont, Corliss & Co.

C. L. Suckley Observes 30 Years With Journal of Commerce

Well known in the essential oil, drug, chemical and closely related trades, and active in trade association work for a great many years, Chester L. Suckley is observing his 30th year with the editorial staff of the Journal of Commerce. Among his many articles relating to the development of the chemical industry was that concerning the first commercial production of synthetic glycerin in the United States scheduled to get underway late this year.

John Britton Becomes Enjay President

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John A. Britton, Jr., has been made president of Enjay Co., Inc., New York, N.Y., chemical products marketing affiliate of Esso Standard Oil Co., succeeding H. W. Fisher O. V. Tracy, assistant manager of Esso Standard's Chemical Products Department, has been elected a director of Enjay, succeeding Dr. H. G. Burks, Jr.





John A. Britton, Jr. O. V. Tracy

Mr. Britton became vice-president of Enjay upon its organization in 1947. Prior to that he was associated with the Standard Oil Co. for 27 years.

H. W. Fisher, general manager of East Coast manufacturing and manager of the chemical products department of Esso Standard Oil, will continue to serve as a director of Enjay.

Lautier Fils Now Located in Own Building

Lautier Fils, Inc., the American branch of Lautier Fils, Grasse, France, one of the oldest and largest essential oil producers in the world, is now located in its own attractive building at 321 Fifth Ave., New York, N.Y.

Lautier Fils was founded in Grasse in 1795 and prior to 1922 its products were sold in the United States through an American agent.



Lautier Fils Building

In that year the American company was established with offices and laboratories at 47 Cliff St. By 1930 the growth of the company's business necessitated larger quarters and it moved to 78-80 Beekman St., where it remained until the Spring of 1935 when it was again forced to seek larger quarters at 154 West 18th St. The continuous growth of the company from its inception under the capable direction of Camille H. Bourguet again made it evident that still larger quarters were necessary to properly handle its increasing American business. Accordingly it decided to purchase the attractive five story building at 321 Fifth Ave., where it has been located since March 1 of this year.

Lautier Fils, Inc., is at present occupying three floors of the build-

ing. Two of these have been completely modernized and equipped with fluorescent lighting. New furniture has been purchased for the offices. Large exhaust fans have been





Camille H. Bourguet Rene H. Bourguet

installed over the packing area. The laboratory, shipping and storage spaces, have been organized to promote the maximum efficiency. Increased storage capacity has been gained through the installation of drum racks. The entire building is now safeguarded by a new sprinkler system. As soon as space becomes available, the management plans to furnish a modern showroom overlooking Fifth Avenue.

The officers of the company are: President, Francois Morel, Grasse, France; Vice President and General Manager of the American company, Camille H. Bourguet; Secretary, Mrs. K. Monroe; and Treasurer, Paul Morel, Grasse, France. W. E. Rogers who has been associated with the company as perfumer chemist for 15 years is in charge of the research and general laboratories. Rene H. Bourguet who joined the company two years ago following his graduation from the Massachusetts Institute of Technology is assistant general manager. It was largely due to his work that the architect's specifications were adapted to the requirements of the company.

Edmund Mann to St. Louis

Edmund Mann, of the Dow Chemical Co.'s Cleveland office has been transferred to the St. Louis Division. His duties are those of general chemicals salesman in the metropolitan St. Louis area.

Majestic Metals Enlarges Showroom

Majestic Metals, Inc., has enlarged its showroom at 565 Fith Avenue, New York, N.Y. Joseph Leshin continues in charge of sales as he has heretofore.

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Graham to Firmenich Flavor Division

Charles C. Bryan, managing director of Firmenich & Co., New York, N.Y., has announced the appointment of W. Douglas Graham as technical director of the firm's flavor division.

Park Becomes President of Salesmens' Association

James G. Park, Enjay Co., has been made president of the Salesmens' Association of the American Chemical Industry. A. Roeffler, Monsanto Chemical Co., has been elected vice-president, and Charles V. Douglas has become treasurer.

F. J. Stokes Becomes Chairman of Board

F. J. Stokes, founder and president since 1895 of the F. J. Stokes Machine Co., has become Chairman of the Board and is succeeded in the presidency by Francis Dougherty, Jr. Mr. Dougherty began with the company as a bookkeeper and rose at intervals of time to his last previous position of secretary-treasurer. He was educated at Frankford High School and at the Pierce School of

Business Education. He is a member of the Chamber of Commerce, the Research Institute, and the Metal Manufacturing Association.

Mr. Stokes was educated at the Germantown Friends School and Harverford College. He is a member of the American Chemical Society, the Franklin Institute, the American Academy of Natural Sciences, the American Pharmaceutical





F. J. Stokes

Francis Dougherty

Manufacturers' Association, and has been a member of the boards of several banks throughout his career. He is vice-president of the Ludwig Institute, a sponsor of the American University of Cairo, a trustee of Bryn Mawr College, and an overseer of the William Penn Charter School

ADCIOM Hears "News From Washington"

"News From Washington" was the subject of a talk by Dr. Frederick J. Cullen when he addressed the Associated Drug and Chemical Industries of Missouri, Inc., meeting in St. Louis last month.

Dr. Cullen is general representative for the Proprietary Association at Washington, a position he hasheld since 1934.

Spice Trade Meeting

The American Spice Trade Association held its 42nd Annual Convention at the Hotel Astor, New York, N.Y., May 3-5. William Archibald was chairman of the Convention Committee.

Berle Assistant Works Manager for Innis, Speiden

W. H. Sheffield, president of Innis, Speiden & Co., New York, N.Y., has announced that Col. Charles H. Berle, coordinator of sales and manufacturing, has been named assistant works manager of Innis Speiden's Isco Chemical Division in Niagara Falls, N.Y.

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CHAPTER III—THE PRODUCTION OF ESSENTIAL OILS: METHODS OF DISTILLATION, ENFLEURAGE, MACERATION, AND EXTRACTION WITH VOLATILE SOLVENTS. By Ernest Guenther.

A. DISTILLATION OF ESSENTIAL OILS. Treatment of the Plant Material; General Methods of Distillation; Equipment for Distillation of Aromatic Plants; Practical Problems Connected with Essential Oil Distillation; Hydrodistillation of Plant Material at High and at Reduced Pressure, and with Superheated Steam, Field Distillation of Plant Material; Rectification and Fractionation of Essential Oils, Hydrodistillation of

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- C. CONCENTRATED, TERPENELESS AND SESQUITERPENELESS ESSENTIAL OILS.

CHAPTER IV—THE EXAMINATION & ANALYSIS OF ESSENTIAL OILS, SYNTHETICS, AND ISOLATES. By Edward E. Langenau. Introduction; Sampling and Storage; Determination of Physical Properties; Special Tests and Procedures; Detection of Adulterants; A Procedure for the Investigation of the Chemical Constituents of an Essential Oil

APPENDIX—Use of Essential Oils; Storage of Essential Oils; Tables of Boiling Points of Isolates and Synthetics of Reduced Pressure; Conversion Tables.

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EDWARD E. LANGENAU, B.S., Director of Analytical Laboratories, Fritzsche Brothers, Inc., New York, N.Y.

GEORGE URDANG, Ph.G., D.Sc. Nat., Sc.D., Director, American Institute of the History of Pharmacy, Madison, Wisc.

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Miriam Gibson French, former promotion director of Charm Magazine, has opened an office at 333 East 57 St., New York, N.Y., to handle promotion and publicity for fashion and cosmetic accounts. Prior to being promotion director of Charm, Mrs. French was beauty editor of that magazine. Before that, she was publicity director of Shulton, Inc.

Wood to Direct Marketing for Glass Container Institute

R. L. Warren, president of Glass Container Manufacturers' Institute, has announced the appointment of Benjamin Wood as director of marketing for the Institute. Mr. Wood, for the past ten years, has been Managing Director of Tea Bureau, Inc.

Dr. Curme Becomes Vice-President of Union Carbide

Dr. George O. Curme, Jr., has been elected vice-president—Chemical research of Union Carbide and Carbon Corp., New York, N.Y., it has been announced by Fred H. Haggerson, president.

Dr. Curme is a pioneer in the American organic chemistry industry. He was the first to develop the chemistry of aliphatic compounds in this country. Dr. Curme has been the recipient of the Chandler Medal, the Perkin Medal, the Elliott



Dr. George O. Curme, Jr.

Cresson Medal, the National Pioneer Award, and the Willard Gibbs Medal. He is a member of the American Chemical Society, the American Institute of Chemical Engineers, the American Association for the Advancement of Science, the Society of Chemical Industry, the Societe de Chimie Industrielle, and the Chemists Club.

Felton Chemical Completes New Building

The Felton Chemical Co. has occupied its new quarters, adjacent to its existing group of buildings. This modern, four-story, steel and concrete structure has many interesting features, including chemically resistant ceramic walls and floors and the generous use of chromium and glass. It is connected to the mainbuilding by a two-story enclosed bridge.

This unit marks the end of an expansion program started five years ago, and which has resulted in a fourfold increase in floor space and manufacturing facilities at the main plant in Brooklyn, a new factory designed by Robert Felton and built under his supervision at West Los Angeles, Calif., and the pending occupation of larger quarters in Montreal, Canada.

R. S. Aries Opens Office

R. S. Aries & Associates, consulting engineers and economists, have opened offices at 26 Court St., Brooklyn, N.Y. The telephone number is Main 4-0947.

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This Spermaceti should not be confused with inferior hydrogenated sperm oils which are sometimes offered as Spermaceti The Plymouth Brand is the finest which can be produced and is produced from Genuine Sperm Oil by the cold pressing method. It is a very white crystalline wax containing no free oil, has a very low Iodine number and is free of any offensive odors.

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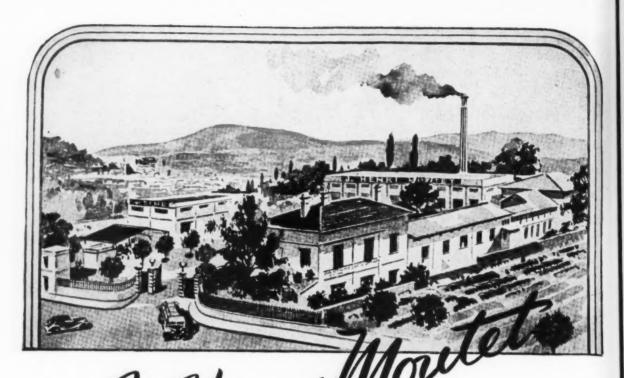
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Ralph Lewis, president of Harriet Hubbard Ayer, William Paley, president of Columbia Broadcasting System, and Charles Luckman, president of Lever Brothers, stop to chat at the Harriet Hubbard Ayer luncheon at the Hotel Ambassador inaugurating the opening of the new Ayer Paris Salon. A transoceanic hook-up united the New York function with the festivities in Paris.

Kilcran Resigns From Colgate-Palmolive-Peet

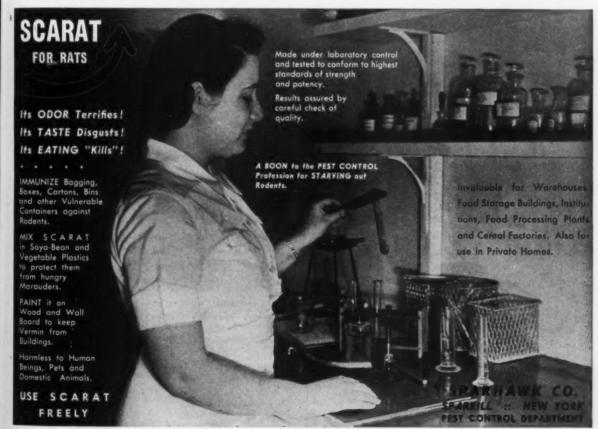
J. W. Kilcran, sales and merchandising executive of Colgate-Palmolive-Peet Co., Jersey City, N.J., resigned March 30. His future plans have not been announced.



Photographed at a recent meeting in Chicago are officers and members of the New England Collapsible Tube Co., New London, Conn. Left to right: P. K. Sheffield, Chicago office; T. C. Sheffield, West Coast sales representative, Los Angeles, Calif.; A. C. Sheffield, New York office; L. T. Sheffield, president; and W. K. Sheffield, vice-president. The firm has been manufacturing collapsible tubes since 1850. The above members include second and third generations of this family.

Polak & Schwarz Represented at Canadian Trade Fair

Both Polak & Schwarz (England), Ltd., of Enfield, England, and Polak & Schwarz, Inc., New York, N.Y., will be represented at the Canadian International Trade Fair which will be held during the first two weeks of June in Toronto. The chief executives of the two firms (K. Bohemen and S. R. Mansfield from Enfield, and B. d'Ancona and L. Davids of New York) will be present and will be glad to visit with old and new friends and discuss the latest developments in the field in both England and the U.S. Their displays will be in booths number 833 and 834 in Group 9.



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Arnold-Hoffman Acquires Cincinnati Plant

Arnold, Hoffman & Co., Inc., Providence, R.I. has announced the acquisition of the business of Harkness and Cowing Co., Cincinnati, Ohio. The new Arnold, Hoffman unit will continue to serve its present accounts and there will be no change in the personnel of this Division. Arnold, Hoffman also announces the election of Wilder H. Haines as a Director; Rufus A. Healy becomes vice-president and Clarkson Taylor becomes assistant treasurer.

Leigh, Inc., Purchased by Shoup-Owens

Shoup-Owens, Inc., Hoboken, N.J. has purchased the machinery, equipment and other assets of Leigh, Inc., Hackensack, N.J. for use by the Karl Voss Corp., division of Shoup-Owens, Inc. By the acquisition of this equipment, the Hackensack operation will be provided with increased production for making fine handmade boxes used by the toilet goods industry. General offices will remain at 1100 Adams St., Hoboken, N.J.

Obituary

Asa B. Foster

Asa B. Foster, sales manager of D. W. Hutchinson & Co., for the past several years, died at his home in Rochester, N.Y. Saturday, April 10. Mr. Foster was well known in the industry, having been associated with it for over forty years. He was also associated with Senzodor, Inc. Mr. Foster was interested in Kiwanis Club activities as well as Masonic work in his home city. However, he had been failing in health for the past several years, and had gradually curtailed his activities.

Mrs. Rose B. Johnstone

Mrs. Rose B. Johnstone, mother of Dr. F. R. Johnstone, Consultant Perfumer of Philadelphia, passed away April 9 at the family home in Philadelphia. Members of the family were at her bedside. Mrs. Johnstone was 88 years old and besides her son, Dr. F. R. Johnstone, left a daughter, Mrs. Warren W. Morrow of Chicago, Illinois, two grand-daughters and four great-grand-children, all of Chicago. The funeral and interment were private.

James O'Connell, Jr.

James O'Connell, Jr., branch manager of the Boston office of Innis, Speiden & Co., New York, N.Y., and a company employee since 1910, died April 6 at Dedham, Mass. He was 59 years old.



James O'Connell, Jr.

Mr. O'Connell was a charter member of the Chemical Club of New England, and also a member of the Dry Salters Club. He was a well-known track official and a former deputy of the Knights of Columbus.

For many years a referee and official announcer at the Boston Athletic Association, and Knights of Columbus Winter track meets at the Boston Garden, Mr. O'Connell was a member of the New England Amateur Athletic Association.

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A remarkable reproduction of the natural oil extracted from pomade. Gives splendid results used alone or with the natural oil.

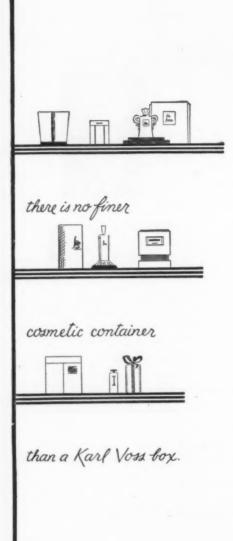
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MARKET REPORT

Synthetic Glycerin Production

W HILE it was the consensus of opinion some months ago that essential oil and aromatic chemical prices had about reached the bottom on the steady downward trend that characterized the market since the war, a close check on current prices will reveal further losses. Such a development is rather surprising in the light of upset international conditions which tend to make for a general feeling of uncertainty regarding replacements of a great many imported articles and continued high wages paid workers both at home and abroad.

Some buyers have been ordering out small lots more frequently to fill immediate requirements. Observers feel, however, that the required upturn in sales volume needed to stabilize the market will not appear until the third or final quarter of the year. In other directions, it is felt that summer business may prove surprisingly large since consumer inventories are at a very low level and consumption of a number of articles usually improves during the period of warm weather.

OILS FOR FLAVOR COMPOUNDS

Oils that go into flavoring compounds for the beverage and certain divisions of the food trade should be commanding more attention at this time.

With low consumer inventories it is generally agreed that raw materials are in a more sensitive position than at any time since the war. Slightest upturn in retail sales of finished products should immediately be reflected in wholesale markets.

Among articles scoring the sharpest declines over the past month were cananga, patchouli, sandalwood, and cassia. After showing a further slight reduction, oil ginger turned firmer in keeping with higher costs of the spice.

Considerable forward buying was noted in Italian oils because of the uncertainty that existed in that country concerning the election. Regardless of the outcome of the election local houses seemed particularly anxious to have goods shipped before April 15. During the first week in April there arrived here a total of 1,075 cases of bergamot oil from Italy thus marking the largest single shipment of this oil from that country since the war. A fairly large quantity of lemon oil arrived on the same steamer. The activity was based on the belief that should Italy swing toward the left, future replacements would be exceedingly difficult, while if the election results proved satisfactory shipping prices will move sharply higher.

Firmer reports were received from the country regarding mint oils. While it is still rather early to obtain details covering the new crop it is understood that because of unfavorable weather conditions, considerable root damage is apparent in the major producing States, Michigan and Indiana. A fair amount of forward buying has been reported in new crop peppermint oil at prices ranging from \$7 to \$7.25 per pound for August-September deliveries.

AROMATIC CHEMICALS MARKET

Trade in aromatic chemicals was reported as spotty. The trend of the market was rather mixed with chemicals derived from oils continuing to display a soft tone and those manufactured from basic coal chemicals showing considerable strength. Dwindling coal supplies forced cutbacks at major cokeovens producing benzol, toluol, xylol, naphthalene, and creosote oils. Full impact of reduced cokeoven operations will not be felt in aromatic chemicals for at least another week or more.

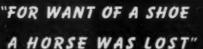
Crude glycerin was featured by a decidedly stronger tone. While it was expected that prices would continue to move upward to the former level of 28 cents for soap lye, basis 80 per cent and 31 cents for saponification, basis 88 per cent, there appears no justification for any upward movement in refined glycerin prices especially since the industry is facing increased competition from synthetic material, production of which is expected to get underway in the latter part of this year.

The synthetic glycerin plant which has been under construction for some time will have a capacity of approximately thirty million pounds a year, a good portion of which has already been contracted for by major consumers.

The demand for refined glycerin turned more active in mid-April. This was believed to be due to the fact that many consumers had underestimated their April needs when making earlier commitments. Leading refiners indicated that virtually all of their April production will have been moved to consumers by the close of the month.

Several industrial chemicals that had previously shown signs of easing as the result of reduced takings by some major industries developed a stronger tone because of the coal strike. While the miners were recently ordered back to their jobs, chemical manufacturers pointed out that it would be some weeks later before the industry would feel the full effects of the strike.

Menthol turned easier. Buying subsided with the passing of the heavy consuming season and new crop offerings from Brazil served to have a depressing influence upon the general tone.



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Cyclonol replaces Menthol satisfactorily in shaving creams and lotions, liniments, analgesic balms, ointments and similar preparations. It has also been accepted by the U. S. Treasury Department as a Densturant for alcohol in place of Menthol U.S.P.

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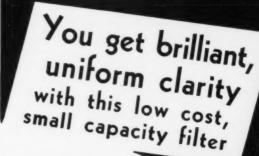
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